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MEN, MONEY, AND MOTORS

THEODORE F. MacMANUS
AND
NORMAN BEASLEY

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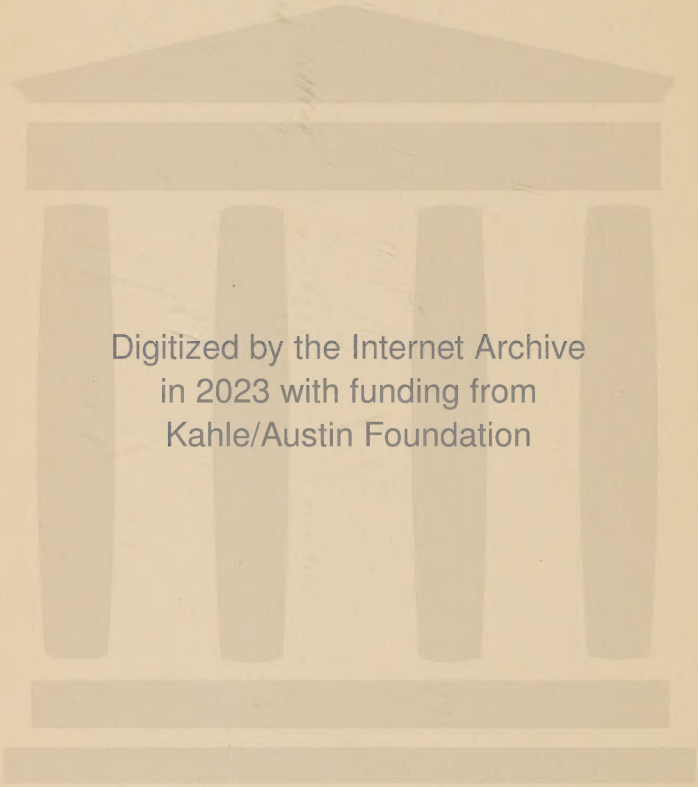

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Men, Money, and Motors

MEN, MONEY, AND MOTORS

THE DRAMA OF THE AUTOMOBILE

BY

THEODORE F. MacMANUS

AND

NORMAN BEASLEY

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INTRODUCTION

Some thirty years ago forces began to gather —an industry began to grow. Only thirty years, less than half a lifetime, and now the greatest industry in the world's history. Of course you know what it is—the automobile industry.

It is an industry that must become greater and greater because the development of civilization depends upon it. It is transportation, and from that forgotten day when man fashioned the first wheel that he might move about, the story of man has been the story of transportation.

This book is of men who have pioneered in automobiles. It is something that must be told now because the pioneers are passing. Some of them have gone; others will follow as the years drift quickly by. Told tomorrow, it is repetition.

As later on we have written:

"There was a rugged picturesqueness to those pursuers of fortunes. They had about them something of the tang and flavor of piracy. The stuff from which men are made heroic was not

altogether lacking in them. Big things were done and the doers became big in the doing. When we measure the paths through which we have come, this was as it should have been.

"Heraldry has gone. The sturdy trek behind the covered wagon is no more. Business has become the last great heroism. In its beginnings the automobile business was as were—and will be—the beginnings of all businesses. . . . a conflict of the hard-muscled and strong-willed, for only they will survive.

"Some romanticists have attempted to canonize them. That is attempting too much."

If, at times, halos which have been put about the heads of certain men seem to have been disturbed, remember this:

Business is business and not the saving of the soul nor the redemption of the body politic.

We hope you will like the story.

THEODORE F. MACMANUS
NORMAN BEASLEY

FOREWORD

WHAT a kaleidoscopic business it has been—this automobile business! Only, one might say, twenty-five years old, but a business whose Gargantuan characteristics have made it into our greatest industry.

Detroit in the nineties, slumbering in the shade of its trees and fanned by the breezes from its wide river. Detroit in 1907, dotted with sheet-iron shacks, all bearing high-sounding names. With some the metamorphosis has been into gigantic brick and steel and stone industrial institutions; of others, off in a dump heap, somewhere, there remains, perhaps, a twisted frame or a battered cylinder block or, in the album of a collector, a photograph.

What a parade of names then little known, now famous! What a parade of names then famous, now little known!

Leland, Joy, Chrysler, Fisher, Durant, Willys, White, Franklin, Jewett, Ford, Metzger, Everitt, Brush, Hupp, Olds, Jordan, Winton, Selden, Dodge, Graham, Chapin, Coffin, Chalmers, Couzens, Haynes, Sloan, Kettering, Collins, Briscoe, Bate, Warren, Knudsen, Hawkins,

Lee, Lewis, Thomas, Klingensmith, Wilkinson, Bennett, Chandler, Nash, Daniels, Duryea, Anderson, Eames, Drake, etc., carry the list to its conclusion and the result remains the same—only here and there one that remains familiar.

Big business today, and still swiftly changing.

Yesterday—

Roistering, resounding, rollicking hours when men were selling what they didn't have; when they used to get together and shout that old refrain which came out of Wall street:

> "He who sells what isn't hisn
> Must buy again or go to pris'n."

Money poured in—left just as quickly. Millions then; poverty now. Millions now; poverty then. They drank champagne out of silver and gold goblets when they were flush; they were just as eager for beer from tin buckets when they were broke. Picking up the threads of romance, color, drama, and life, we will try to unravel strands that have been woven, almost inextricably, into the pattern of this great, great story.

The story of the automobile finds its beginnings in France between the years 1760 and 1770, when Captain Nicholas Joseph Cugnot built three machines, two of which were experimental and of which nothing but hearsay re-

mains. His last one was constructed in 1769 and was intended for use as a tractor for a field-gun. It was a steam conveyance and, becoming unmanageable, was wrecked when it ran against a stone wall.

The first American automobile was constructed by Oliver Evans under a patent granted him by the State of Maryland in 1787. Evans, driving his contrivance up Market Street, in Philadelphia, was the first American to hear that cry which became so insistent more than a hundred years afterward:

"Get a horse!"

It sung him into offering to bet three thousand dollars that he could go faster, for five miles up the Lancaster Pike, than any one of the jeering crowd could go on a horse. There were no takers.

Evans continued on his way, circled around, headed toward the river, stripped off the running gear, and the machine took to the water, going upstream and running for a number of miles. It, too, was a steam operation.

In England, in 1823, William Henry James patented a road locomotive but when he died, in 1873, the solution to riding on wheels and moving about without the use of rails seemed as far removed as ever. But the idea was going forward. In 1885 Carl Benz built the first inter-

nal-combustion, hydro-carbon motor and, encasing it in a crude body, he ran it up and down the streets of Mannheim, Germany. Eleven years later Duryea, Ford, Haynes, and Winton were beginning to find success in their experimentations.

And—here is where we pick up the romance with its high colorings, its vivid flashes of movement, and its steady glow of achievement; its subversion of hopes and its somber stitchings of tragedy.

Men, Money, and Motors

Men, Money, and Motors

CHAPTER I

The Levee at Which Men Crowded

DETROIT, in the nineties, slumbering in the shade of its trees and fanned by the breezes from its wide river . . . in a few secluded spots men were talking about gasoline automobile machines.

One of the first companies to be organized was the Detroit Automobile Company. This was in 1899. The group of incorporators included Frank J. Hacker, Patrick A. Ducy, Clarence A. Black, Albert A. E. McMillan, William C. Maybury, Safford S. DeLano, Frank W. Eddy, William H. Murphy, William C. McMillan, Frank R. Alderman, Fred S. Osborn, Clarence A. Black, and Henry Ford. The purpose of the organization was to exploit a car Ford was building and which had been promoted by Alderman.

The company entered into an agreement with Ford to advance $10,000, which was to pay for the building of ten cars—it didn't pay for one. While Ford was experimenting, contracts for the motor were awarded a marine-engine build-

ing concern known as the Leland-Faulconer Company.

Touching ever so lightly, the fingers of fate were beginning to strum the cadence of a business tragedy.

Henry M. Leland, tall, whiskered, almost fanatical in some of his utterances and an engineer with a wide reputation, was opposed to Ford. The motor was faulty, and Leland, the engineer, was caustic in his criticisms of Ford, the inventor.

Maybury, Murphy, and one or two of the others refused to listen—at first. But as costs mounted confidence receded. Leland's insistence took root.

Ford was given an opportunity to resign. The $86,000 which had been spent in his experiments was absorbed and as his share he was given $1,800 to pay for a carburetor (or "a mixer" as he called it) and on which he had applied for a patent. Otto Barthel was named to succeed him. He also failed. Leland then recommended Alanson A. Brush, and a new company —named by William H. Murphy, called the Cadillac Motor Car Co.—succeeded the Detroit Automobile Company.

William E. Metzger, who had conducted a retail store selling bicycles and Winton cars, was appointed sales manager. Working at feverish

pitch, the company managed to complete a model which was taken by Metzger to the first New York Automobile Show in January, 1901. It was displayed in a horse stable.

Metzger, gray-eyed, tight-chinned, thin-lipped, and a salesman, sold 2,286 Cadillacs at that show, receiving, on each ordered car, a deposit of ten dollars. This sum of approximately $23,000 served to plug part of the gap in the finances of the Cadillac company. The cars were built, thereby relieving Metzger from possible results of selling something he did not have.

Henry Ford, rid of one responsibility, began work on another model. On November 23, 1901, a second Ford company—the Henry Ford Automobile Company—was incorporated in Michigan with a paid-in capital of $38,000. Ford was credited with $10,000 of that capitalization. Within a year this company was dissolved, mainly because of the wranglings between Ford and his stockholders. Ford wanted to build a car of low price; his associates demanded the high-price field.

Ford, in those days, displayed much the same astuteness with which the world has become so familiar. In his two disappointments—they could scarcely be called failures—his stubbornness held to the right of use of his own name. Being human, it is fair to assume that in his dis-

couragements he could not forget Leland, his enemy in deed if not in thought. For, Leland was growing rapidly in industrial stature. He became president of the Cadillac Company and continued in that capacity for nearly twenty years. Resigning, he started the Lincoln Motor Car Co.

However, although Leland had been growing fast, Ford, after two false starts, grew faster. Financial difficulties came to the Lincoln Company and Ford was asked to intercede. He did. He bought the Lincoln business at a receiver's sale on February 4, 1922, paying $8,000,000 for the plant and other assets of the company. Leland, a disappointed old man in his seventies, stepped down—and out.

William C. Durant was another who loomed against the horizon of automobile skies and whose squat figure threw its shadow across the industry. Born in Boston, grandson of a governor of Michigan, errand boy, grocery clerk, mill hand, patent-medicine barker, cigar salesman, carriage-maker, promoter—Durant was one of the first to vision the wide possibilities of the motor-drawn vehicle.

The day is recalled when he made this statement: "The time will come when five hundred thousand automobiles will be manufactured, and sold, in this country every year," and George

W. Perkins, famous banker and partner of J. Pierpont Morgan, stamped out of the room, disgusted, called Durant a dreamer, and ended by growling:

"If he has any sense he'll keep those notions to himself if he ever tries to borrow money."

Durant was the organizer of General Motors, the first four units being Buick, Cadillac, Oldsmobile, and Oakland. He paid something more than $1,000,000 for the Olds business and as the deal was being consummated is said to have exclaimed:

"That's a hell of a price to pay for a bunch of road signs!"

In explanation it should be written that in those days Olds was a large user, comparatively speaking, of highway bulletins.

Walter Flanders was another of those early giants. Red-faced, bull-necked, tousle-haired, and strong-armed, he planted himself in Ford's path one day and bellowed:

"Are you crazy?"

Ford, standing and smiling, asked:

"What seems to be the matter?"

"The boys have told me you are dropping the old model. Don't you know we have thousands of orders? Don't you realize you're scrapping everything we've done? That this new plaything of yours won't sell?"

Ford patiently told his subordinate he thought the new model would pass all the records achieved by the old one. Flanders walked away. He dared not trust himself to further speech.

The new model, over which he was so much wrought up, was the Model T which was to sell more than 15,000,000, carry Ford's name all over the world, and make him a billionaire.

Flanders, not long afterwards, left the Ford employ and started the E-M-F Company which, after a bit, was absorbed by the Studebaker Corporation. But not until Flanders and his partners—Barney F. Everitt and William E. Metzger—had grown wealthy.

The automobile business, for quite a few years, was a levee at which men crowded, sending out their packets on the swirling, treacherous tides of popularity. Few survived.

In 1901 there were 60 builders of steam cars and 41 of electric propulsion. In 1902 there were 106 steam operations, 99 gas builders, and 40 electric manufacturers, a total of 245 companies scattered through almost as many communities. Today there are less than fifty makes of all cars manufactured in this country. In the intervening years the financial bells tolled for hundreds and hundreds.

Men who achieved in the automobile business in those early days did so because they deserved

to achieve. Some romanticists have attempted to canonize them. That is attempting too much. Business then, as now, was business—not the salvation of the soul nor the saving of the body politic. Those men were frost-bitten, ugly at times, rough-tongued, and heavy-fisted. Age has made them—some of them—philosophical; in youth they were on fire. Hard and heroic they were but human, always. Intensely so.

Three groups there were, each located at the point of a triangle and sniping along the boundaries of its three sides. In one corner, the steam manufacturers; in another, the exponents of electricity; in the third, the gasoline disciples. Of the three, in those early days, the gasoline builders received the least attention. The first modern steam car was built by S. H. Roper, of Roxbury, Massachusetts, in 1889. Stanley Brothers, Whitney, White, Riker, Prescott, Gaeth, Lane, and others got into the field. White emerged as the dominant force.

The experience of the White organization included sewing machines, roller skates, and bicycles. Thomas H. White, founder of the company, watched his sons play with this new mechanism of transportation, furnished them with words of wisdom, and backed them with financial encouragement. In 1901 the company was turning out three cars a week; in 1906 its produc-

tion was 1,500 cars. Rollin H. White was the engineer; Walter C. White, a few years out of Cornell, was the salesman.

The White company attained its position in the steam field by shutting out others from using its patents. In 1906 the company, needing all the support it could get, offered to share its patents, on liberal terms, with any concern desiring to get into the business of manufacturing steam cars. There were no takers. White quietly abandoned the steam car and went into the gasoline field one year later.

The first electric car was designed by William Morrison, of Des Moines, Iowa, in the summer of 1891 and was sold to J. B. McDonald, president of the American Battery Co., of Chicago, in 1892. A trade paper—*The Western Electrician*—in its issue of September, 1892, published a story of the commotion which attended the running of this car on the streets of Chicago.

In part, it was written:

"The sight of a well-loaded carriage moving along the streets at a spanking pace with no horses in front and apparently with nothing on board to give it motion, was a sight that has been too much, even for the wide-awake Chicagoan.

"It is most amusing to see the crowd gather wherever the vehicle appears downtown. In a number of instances so great has been the curiosity of those on the

streets that the owner, when passing through the business section of the city, has had to appeal to the police to aid him in clearing a way for his carriage."

Through the ensuing ten years numerous electric vehicle companies were organized and it was in this period that Henry Ford was working on his motor while employed as chief engineer for the Detroit Edison Co. Ford's interest in the gasoline motor was not shared by Alexander Dow, president of the company. Dow called him aside one day and offered him the superintendency of the plant if he would cease his experiment.

"I do not object to experiments with electricity," explained Dow. "Electricity is the coming thing. Gasoline—no."

Ford declined and made it emphatic by resigning.

Large sums of money were spent in waging the war of the technicians. The steam manufacturers alluded to speed and the absence of vibration—gasoline builders combated these feasible arguments by pointing out that no particular mechanical knowledge was needed to operate their cars; electric manufacturers referred to quietness and cleanliness—gasoline builders tossed back the fact that no battery had been built which would operate an electric vehicle for

a sustained period and it wasn't convenient to equip cars with trolley poles so they could use the overhead systems of street-car lines.

In the fermentation of public opinion the gasoline motor came to the top.

With steam and electrical manufacturers sideswiped and ditched, the gasoline car manufacturers renewed the fight among themselves. Dog eat dog was the rule, and bankers selected the victims. To those in the ascendency support was given; towards others a nod and down they went.

This was why men became frost-bitten, ugly, rough-tongued, and heavy-fisted. They dedicated themselves to the machine. They made it in the thought that it would make them. It turned out that they made themselves less as men and more as machines—and the machines crushed them.

Detroit occupied no prominence in the industry until the Olds Motor Works announced a production of four thousand cars in 1902. Detroit's first automobile and sporting goods show was held in 1902, and the Henry Ford Automobile Company displayed a Ford-Tom Cooper racer. In that same year the registrations in New York State showed 347 Locomobiles, 138 Mobiles, 104 Wintons, 48 DeDions, 45 Columbias, 39 Gasmobiles, and 32 Oldsmobiles. These,

with a scattering of other makes, brought the total, in the state, to 909 cars.

A 500-mile race from New York to Boston was the first really largely attended sporting event of the motor and preceding this race, in 1902, was a 100-mile endurance contest on Long Island. The average time for the finishing cars was almost six hours and fifteen minutes or approximately fifteen miles an hour. Theodore Roosevelt was the first President to ride in an automobile, and newspapers carried the story on their front pages. "Roosevelt's display of courage was typical of him," one editor wrote. The ride was taken in September, 1902, in Hartford, Connecticut, and the Presidential car was closely followed by a horse-drawn vehicle which was to serve in the event of an emergency.

The Cadillac company, in 1903, was helping Olds to bring automobile prestige to Detroit. In that same year another company was organized; it, too, was destined to help.

It was on June 4, 1903, that John W. Anderson, a young attorney in Detroit, wrote to his father in LaCrosse, Wisconsin. He was planning to invest some money and he was seeking advice. In other letters to his father he had explained he had, as a client, A. Y. Malcomson, a coal dealer, and that James Couzens was Malcomson's confidential employee. In the light of events that

have taken place, Anderson's letter can be considered strangely prophetic.

It follows:

"Through the country Mr. Ford is looked upon as an expert. He has won numerous racing contests and is widely known, which will be a big asset in his own car sales. The old machine which he built he sold to his former backers when he retired. He did reserve the right of his own name. They cannot take that away from him.

"The new machine which he plans to produce is away ahead of the old one and he has already been granted seventeen patents on its features. It has been demonstrated to experts and they are all enthusiastic about its possibilities. The men behind the company plan no large factory with the entailing investment. The parts are to be made under contract with Dodge Brothers who have a fine plant and had offers from the Oldsmobile and Northern companies to do their work. They thought better of the Ford product.

"They have a contract to make 650 engines and running gears.

"Contracts are being made with the Hartford tire people for the tires at $46 a set; with the Prudden Wheel Company for wheels at $26 a set and with the Wilson Carriage Company for bodies at $52 each. The cushions will cost $16. Dodges will get $250 for their job.

Mr. Malcomson has arranged with a Mr. Strelow from whom he rented a coal yard at Mack Avenue and

the Terminal railway, to build a small assembling plant 250 feet by 50 feet for $3,000 to $4,000 and this will be rented to the company at $75 a month.

"In this plant there will be ten or twelve men at $1.50 a day together with a foreman. They will assemble the car, paint and test it. You can see how small the manufacturing expense will be.

"We figure to sell for $750 without a tonneau and $850 with a tonneau. We figure our costs for the job without tonneau will be $554 and $50 more with the tonneau. This gives us a profit of $246 on one car and $196 on the other, allowing twenty per cent for selling. A Buffalo man has ordered twenty-five. The business is all spot cash with no guarantee on the car. The Olds is away oversold. They made $1,000,000 on a $500,000 capitalization last year.

"Malcomson is a success in all kinds of business. Couzens is going to leave the coal business and he is a crackerjack. Couzens' office ability coupled with Ford's inventive genius will make it a sure success. Couzens says he is going to invest everything he can beg or borrow. It looks like a certain fifty per cent profit after allowing for a good sinking fund. My money should be back by spring.

"They are to deliver ten machines a day beginning July 1 and at least have them all finished by October 1. It is amazing the way the thing has been started. Everything has been done since last October. Other companies with a half dozen draftsmen under lock and key have been three years making the same progress."

Ten days after Anderson mailed this letter the Ford Motor Company was organized. Strictly speaking, the birthday of the company was June 15 and not June 16, 1903, as has been printed so often. On the night of June 15 the stockholders met in A. Y. Malcomson's office and completed their incorporation plans. The interesting events which preceded that meeting will be told in another chapter. The following morning, at 9:30 o'clock, the incorporators were sworn in by a notary and, legally, the Ford Motor Company came into existence.

On motion of Malcomson, it was agreed that the capitalization should be $150,000 with $100,000 subscribed and fully paid. Of this amount $51,000 was to be owned by Ford and Malcomson, representing patents and patents applied for at $40,000 and machinery to the value of $10,000, with $1,000 worth of contracts. The first minutes show this stock distribution:

Henry Ford	255	shares
A. Y. Malcomson	250	"
John S. Gray	105	"
John F. Dodge	50	"
Horace E. Dodge	50	"
Albert Strelow	50	"
Vernon C. Fry	50	"
Chas. H. Bennett	50	"
Horace H. Rackham	50	"

John W. Anderson	50	shares
James Couzens	25	"
Chas. J. Woodall	10	"

In cash there was actually about $28,000. Anderson subscribed $5,000, while Rackham used five acres of city land to get $5,000 for his subscription. Dodges paid for their stock in machine work while Gray, a banker, was the largest cash investor with $10,500. Strelow was a German contractor and his subscription, according to some, was quite a drain on his courage. Fry and Bennett were unable to pay in their full amounts but managed to scrape together $2,300. Woodall was an employee of Malcomson's.

Couzens had $900 in cash and his sister Rosetta had $200 in a savings account. Brother and sister decided, after a long conference, to use $100 of the money, bringing Couzens' cash investment to $1,000. He gave a note for $1,500 to make up the balance. Malcomson and Ford endorsed it. The close relationship between Ford and Couzens really began at that meeting and was to continue through the following ten or eleven years.

Following the meeting, the two were riding up Brush Street with Ford at the tiller and Couzens beside him. Ford had been silent for

some time and, finally, half-hitching around in his seat, he glanced at Couzens and said:

"Jim, what do you think we ought to ask those fellows in the way of salary?"

For years thereafter it was Ford and Couzens against "those fellows" and at the election of officers, a week later, Ford's salary was fixed at $3,000 a year and Couzens' at $2,500. Ford was thirty-nine years old. It had been ten years since he had made his first car.

CHAPTER TWO

Hopes Rode on Glinted Waves

Hopes rode on glinted waves of popularity in those days. Glinted waves that flung all but the strongest far ashore and into the sand dunes and thickets that shelter forgotten men.

In 1903 Durant was taking charge of operations at Buick; Ford was in beginnings that were to grow to greatness; Packard was manufacturing; Winton was manufacturing; others such as Auburn, Holsman, Columbus, Chadwick, Bergdoll, Overland, Moline, Premier and Carbon were entering the automobile field. There were others, too—many others.

Names, threaded like buttons. Little names that have grown into big buttons; high-sounding names that, as little buttons, have rolled into obscurity. You may remember some of them:

Autodynamic, Ajax, Adams, Farwell, Aerocar, Aurora, Angus, Ace, Adria, Binney & Burnham, Buffalo, Bramwell, Brasier, Bristol, Buckmobile, Blackhawk, Beverley, Blomstrom, Babeeck, Brownikar, Benner, Ben Hur, Bewman, Conrad, Capitol, Crestmobile, Cincinnati, Craw-

ford, Cato, C. V. I., Comet, Coates Goshen, Celt, Darling, Desberon, Dyke, Davenport, Duer, Durocar, DeTamble, Economy, Everybody's, Eagle-Rotary, Foster, Fanning, Friedman, Fredonia, Fostoria, Grout, Gurley, Grido, General—

Holyoke, Howard, Holley, Holsman, Hewitt, Halladay, Heine Velex, International, Imperial, Iroquois, Jones Corbin, Jaxon, Jewell, Jenkins, Kensington, Knox, Keystone, Kidder, Kuns, Konisglaw, Keeton, Krit, Leach, Loomis, Lozier, Luverne, Marlboro, Milwaukee, Mongrief, Mohawk, Matheson, Meyca, Mackle Thompson, Marr, Metcar, Morse, Mighty Michigan, McCue, Maryland, New Home, Norton, Neustadt Perry, Niagara, Norwalk, Orient, Ormond, Otto, Peeples, Pomeroy, Prescott, Reading, Reber, Regas, Rambler, Russell, Rotary, Ross, Ranier, R. C. H., Spaulding, Shain, Steamobile, Storek, Sandusky, Santos-Dumont, Single Center, Sultan, Triumph, Taunton, Thompson, Toledo, Touraine, U. S. Long Distance, Upton, Vaughan—these and others, others, others.

There was a rugged picturesqueness to those pursuers of fortunes. They had something of the tang of piracy. The stuff from which men are made heroic was not altogether lacking in them. Big things were done and the doers became big in the doing. When we measure the

paths through which we have come, this was as it should have been.

Heraldry has gone. The sturdy trek behind the covered wagon is no more. Business has become the last great heroism. In its beginnings the automobile business was as were—and will be—the beginnings of all businesses . . . a conflict of the hard-muscled and strong-willed, for only they will survive.

It is in the first stages of all businesses that men trained in business methods must strain in keeping the costs of experiments within bounds. Everything was not going well for the Ford Motor Company in those summer days of 1903. A little more than a month after the formation of the company, or on July 25, the first cars rolled out of the Ford plant. Ford and Couzens, with their coats off and their collars unbuttoned, helped nail the first shipments into the freight cars.

A week or so later a complaint came in from Pittsburgh to the effect that the car would not climb hills. A crude incline had been propped against the side of the factory for making deliveries to the second floor. Using the incline as his proving ground, Ford went to work to remedy the fault. Before he could straighten out the difficulty, other sections of the country

began to be heard from and Ford, in hurt pride, declared:

"We'll stop shipping until these cars are right."

"You stop shipping and we go bankrupt," snapped Couzens. "Discounting the bills of lading is all that stands between us and that, right now.

Couzens prevailed. Mechanics were rushed out to service cars while Ford worked, almost night and day, to clean out the mechanical difficulties.

On November 13, 1903, Couzens was made sales manager in addition to his other duties and in December he set up a principle which has prevailed in the Ford organization ever since. A. Y. Malcomson, one of the two largest stockholders in the company and Couzens' former employer, sold a car at a discount. He sold it to Harry M. Jewett, who was to make millions in manufacturing the Paige car, and Couzens protested so vigorously that the other stockholders voted to compel Malcomson to pay the difference.

A short while afterwards there came into the company a young bookkeeper named Frank L. Klingensmith who, in after years, was to sit with Henry and Edsel Ford in the seats of management.

Klingensmith, in search of an invoice one afternoon, went in to where Ford was experimenting. He told his employer of his quest and Ford answered:

"Perhaps you'll find it upstairs."

Klingensmith followed the suggestion and also found a collection of unopened letters all addressed to Henry Ford. He used two waste baskets to carry the letters to his own desk and late into the night he opened envelopes and read their contents. Some were personal letters; some were bills; some were checks.

The following morning Klingensmith told Ford and Couzens of his discovery. Later in the day Couzens issued instructions to him:

"Hereafter, you will open Mr. Ford's mail."

Klingensmith thereupon became the first of Ford's secretaries and continued to take care of his employer's correspondence for a number of years.

The purpose in relating these incidents in the life of a great manufacturer is not to underrate him, but rather to show that in those days Ford's thinking was all confined to bettering the product which carried his name. Matters pertaining to business were entrusted to others.

John and Horace Dodge were brothers. Without them it is conceivable there would have been no Ford Motor Company and no Henry Ford

as the world knows him. Builders, in a large measure, of the first Ford car, financial backers of Ford, suppliers of Ford from those days in 1903 until 1914 when the brothers began manufacturing a product to bear their own name—giants in automobile production for six short years and . . . death!

A few more years and their widows marry again. A short time and the tremendous business these brothers had built through courage, faith in each other, ingenuity and hard work and turned over as a family heritage, passed into alien hands. Alien hands that lost their grip but, in losing, flung the baton into the air where it was caught by Walter P. Chrysler, a young man who went into debt that he might own an automobile, take it apart, examine it, and see what made it run.

Wherever they are, these Dodge brothers must be glad again, for Chrysler is as they were —a bold spirit.

John Dodge's interest in transportation began with bicycles. In 1898 the Evans & Dodge Company, of Windsor, Ontario, was absorbed by the National Cycle & Automobile Company, with headquarters in Hamilton, Ontario. At the same time the National company also took over the E. C. Stearns Company, of Toronto.

With the Stearns company was a young superintendent named Frederick J. Haynes.

Haynes was hopeful of securing the superintendency of the new organization. Only hopeful, for he had heard flattering things about a man in Windsor named Dodge. His first contact with Dodge—and his own realization that a superintendent had been chosen—came on the day when Dodge walked into the Toronto plant and gruffly inquired:

"How long will it take you to pack up this factory?"

"Why do you ask that?"

"My name is Dodge. I want to know."

"I can have the job finished by December thirty-first," answered Haynes.

"In a little better than two weeks?"

"Yes,"

"Do it."

As Dodge turned away he remarked:

"If you want to come with the plant, it will be all right with me."

On January 1, 1899, Haynes reported at headquarters in Hamilton. It was a cold day and he found Dodge near a stove in the office, his overcoat buttoned and stamping his feet to keep warm. Dodge, without waiting to hear from Haynes, growled:

"Nothing doing today. Come back tomorrow."

Angered at his manner and the tone of his voice, Haynes walked outside, flipped a coin in the air, and cried:

"Heads I quit; tails I stay."

Tails won.

The following morning Dodge ordered Haynes to take a gang of men and clean up the plant. After a week of hard and dirty work they reached the top floor. It contained baking ovens that were caked with soot and burned oil. Haynes went to work with his men and cleaned them until, as he said, "my mother could have sat down in them in a summer dress."

Dodge gave the finished job a brief inspection and before Haynes could hand in his resignation—which he had determined upon doing—Dodge's manner changed and in a kindly voice he said:

"Come on down to the machine shop with me. That is where you belong."

A year later Dodge resigned and recommended Haynes as his successor.

One, two, three years passed. Dodge had taken over manufacturing problems for Ford. He sent for Haynes.

"I've got a job for you."

"What is it?"

Dodge explained his part in the organization of the Ford Motor Company and ended by saying:

"I've been talking with Henry Ford. He has authorized me to sign you to a contract."

"I'll think it over," returned Haynes.

The next day Haynes visited the Ford plant, studied it and speculated upon its possibilities for success. He was not impressed. Returning to Dodge he said:

"I don't want that job."

"Why not?"

"Well, you've offered me twenty-five hundred dollars a year and I can't figure out how they can make enough money to pay me such a salary."

Dodge sniffed.

"I've got my money in there."

"Yes, but you're not running the business. If it was your business—or, if you want me to come with you, I'll do it. But, not with Ford. I don't think they will last."

Dodge continued to argue, but Haynes was adamant. There was no place for him in the Dodge business so he went elsewhere.

A few years more and for the second time Dodge sent for him. This time it was to offer him a job as factory manager in the Dodge plant. Haynes took it. As pay day approached

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the secretary of the company went to John Dodge and asked:

"How much are we paying Haynes?"

"I don't know. Ask him."

As the question was passed along, Haynes replied:

"I don't know. Ask Dodge."

Back to Dodge went the secretary and the manufacturer met the question this time:

"Find out what he was getting before he came here and pay him the same amount."

After the Dodge brothers passed away in 1920 Haynes was made president of the company and, later, became chairman of the board, resigning that position when Chrysler bought the business.

At the time he offered Haynes a place in the Ford organization, John Dodge was greatly concerned over the financial position of the company. If the Ford company went into bankruptcy—and there was danger of it—Dodge Brothers, in all likelihood, would go down with it.

A little while back it was written "without Dodge brothers it is conceivable there would have been no Ford Motor Company, and no Henry Ford as the world knows him." We will set about to clarify that statement and add to the observation the names of A. Y. Malcomson and James Couzens.

A. Y. Malcomson was the first man really to

become interested in the new automobile Henry Ford was planning. That is to say, he was the first to become interested with his money. Malcomson was a wealthy man, with banking connections with the German-American bank and the Old Detroit National Bank. John S. Gray was president of the former; Alexander MacPherson was president of the latter. Malcomson was aware of the dislike the bankers had for automobile investments and at a meeting with Henry Ford on the night of August 16, 1902, ten months before the company was incorporated, the two men discussed at length the marketable possibilities of Ford's car.

Finally, Malcomson said:

"I'll go into this thing. But with one understanding. Gray must know nothing of my investment. MacPherson must know nothing of it. I will set up an account in the Central Savings Bank and my advice to you is: Keep quiet about it."

Ford promised.

John W. Anderson, then employed by Malcomson as an attorney, was assigned to draw up a tentative company prospectus, and a brother of Malcomson's was given the job of interesting outsiders in the stock. He tried—and failed. In the meantime Malcomson was going ahead with his plans. He approached John and

Horace Dodge and inquired if they would be willing to manufacture the chassis for the new Ford if he guaranteed the account.

"We'll consider it," they told him.

Negotiations continued for several months. In February, 1903, during a meeting held in Malcomson's office, John Dodge made a proposal regarding payments, and Couzens, springing to his feet, shouted:

"I'll not stand for that."

"Who in hell are you?" roared Dodge, starting from his chair.

"That's all right, John," placated Malcomson. "Couzens is my adviser in this matter."

Dodge subsided.

Before the close of the meeting Malcomson had signed a contract with the Dodges for 650 chassis and had instructed them to begin work as soon as possible. The next few days were busy ones for the coal dealer. Getting in touch with other suppliers, he obligated himself to the extent of $162,500 and in May, 1903, inserted a two-page advertisement in a trade paper announcing a car selling for $850 to be made by the Fordmobile Company, Ltd. To compete with the Olds' slogan of "Nothing to watch but the road," Malcomson concocted a line reading "Everyone can afford a Fordmobile." There appears to be no record of the actual organiza-

tion of this company, but Malcomson, probably, thought it expedient to use the name.

The advertisement further stated that the Fordmobile Company had leased the Dodge Brothers machine shop and that four-fifths of the 650 chassis contracted for had been completed. John Dodge was so enraged he compelled the publisher to make a correction and demanded an apology from Malcomson.

But, Dodge Brothers continued work on the chassis and, as always happens, the day came when money was needed. They looked to Malcomson. He scratched his head; tried to joke with them; asked them if they doubted his ability to pay. The brothers were polite, but firm. Finally Malcomson admitted he didn't have the necessary cash. The Dodges reminded him of an existing written agreement under which they would have the right to market the Ford cars if Malcomson forfeited on his payments.

Malcomson pleaded for time.

"We can't give you an extension," declared John Dodge. "Our money is tied up in materials and we've got to get it out. You've got to take care of your end else we will have to protect ourselves by taking over the sale of these cars."

Malcomson appreciated the justice of their position. He got up from his desk and walked

to the window where he had so often stood and dreamed of days of empire when the streets outside would be filled with automobiles and he would be king—now the dream came crashing down about him and he saw the horses and wagons that were actually there and knew it was Today and not Tomorrow.

His shoulders sagged under a weight of weariness as he turned and promised:

"I will come to the Dodge plant this afternoon. It is the best I can do."

Then—and not until then—did Malcomson decide to go to his regular banking connections for financial help. He knew it would be useless to talk with Alexander MacPherson. He thought there might be a chance with John S. Gray.

Calling on the banker, he made his confession. Gray listened, tapping a pencil against his desk.

"What do you want me to do?" he finally asked.

"I want you to go out to the Dodge factory with me this afternoon and see what is being done."

That afternoon Malcomson, Ford, Gray, and Couzens went to the Dodge plant. Malcomson's strategy had been well planned. Gray listened as Malcomson painted a glowing word picture of the Ford prospects and concluded by saying:

"You put up some money and I'll guarantee to return it to you any time within a year."

"You mean, if I am dissatisfied, at any time, I can call on you for the money?"

"Yes."

Gray agreed to those terms and subscribed $10,500. Within a few days a meeting was held. That was the meeting of June 15, 1903, at which the Ford Motor Company was really organized. During the first year of operations, it paid dividends of 100 per cent. There was more significance to these dividends than the mere matter of sending out checks.

Ford wanted accounts squared with his stockholders. So did Couzens. Henceforth, he and Couzens, later still he and Klingensmith, and still later he alone exercised complete independence in the formulation of policies.

The Dodges—John and Horace—were beginning their climb to the business heights. They were destined to receive millions, from the Ford business alone; Couzens was destined to receive millions; so were John W. Anderson, Horace H. Rackham, and the heirs of John S. Gray. Malcomson, the coal dealer who had the courage to help—and help so much—in the beginning but had not the vision to stay with the proposition once he had been compelled to share that vision with others, was paid off in thousands.

In 1906 Ford bought out Malcomson, paying him $175,000. Couzens and Ford together bought out Strelow, Bennett, Fry, and Woodall. They were paid on the same basis as Malcomson—approximately seven for one—and their stock was split up between Ford and Couzens. The deal put Ford in control with fifty-eight and one-half per cent. Couzens had eleven per cent.

And the details of that deal are another story which rightfully belongs in another chapter.

CHAPTER THREE

The Fascinated Eyes of Youth

Two kitchen tables shoved together. Heavy chalk lines drawn across the tops of them. Carefully measured spacings. A wide spacing at one end. In the wide spacing one miniature automobile. As the spacings narrowed, miniature cars began crowding each other until at the end of the table, in the narrowest spacing of all, there were so many that the vice president had been compelled to drop strings from the ceiling suspending models above other models.

He was talking to a dozen of his associates grouped about the table.

"See what we have in this wide spacing—one car. A Ford. See what we have in this next price class—two cars; in the next three cars; in the next six . . . up at this end, in the narrowest spacing of all and the highest-price class, we have so many cars that I have had to drop miniatures on strings from the ceiling.

"There's the automobile market. We are scattered in different spots and in one particular spot at the wrong end of the table. Crowd-

ing ourselves and being crowded by others off the table. You have asked me to tell you why our business isn't larger than it is. There's your answer. We've got to get down to a place pocketbooks, and not checking accounts, can reach.

"You, all of you, have derided the Ford car. I'll grant we make better cars than Ford—that is, more luxurious cars—but you must understand that the difference between walking ten miles and riding ten miles in a Ford is not the same difference as exists between riding in a Ford and lolling back in the cushions of one of our high-priced conveyances. An automobile is transportation. All other reasons for owning one come after that one.

"Ford occupies the position he does because, for a long time, he has been offering transportation at a low price."

This meeting was held three or four years before this book was written. Directly, it resulted in one of the largest manufacturers getting into the low-price field. Dominance—in so far as the history of the industry has been concerned—has been largely predicated upon dominance in the low-price field.

So, once again we come to a familiar question, with only a slightly different twist to it:

Would the world have known Ford—as it

knows him—had Ransom E. Olds been arrogant enough to have dominated a meeting which ended with his resignation?

Olds had the jump on the low-price market. In 1903 he manufactured—and sold—10,000 cars. All other manufacturers combined were not making that many. His machine was an advance over many others offered at more money. It is reasonable to believe his refinements would have kept pace with the passing years, that his prices would have come down. He had a fine organization. He had vision. He had the romance which colors, in retrospect, the life of a pioneer.

But, he sold his business. He sold it because he was tired of the bickering and argument that went with it. As he has since said: "I had enough money for myself and I did not want to hamper others in expressing their ideas." By that explanation he indicated his weakness—wealth softened him. Wealth had the opposite effect on Ford—it hardened him. Frequently he threatened to sell out—once, he very nearly did—because of arguments and lawsuits with his associates; the final argument ended with Ford buying . . . not selling!

When twenty-one years old Ransom E. Olds had saved $300. Giving an additional $800 in the form of a note bearing 8 per cent interest,

he became a half owner in his father's business. It was a machine shop.

Through his years in high school the son had worked at a machinist's bench in his spare time and, principally, he had been associated with engines. After becoming a partner in the business, he worked with his father in planning a small steam engine and followed this by inventing a gasoline motor which was the first one in the United States to use gasoline directly into the cylinder.

Business prospered in the making of this engine and prosperity, in the form of rapid expansion combined with bad accounts, nearly put them under. Gradually they worked out of their financial difficulties and in 1890 the business was incorporated for $30,000 as the Olds Gasoline Engine Works.

In 1891, young Olds built a steam car which attracted attention in scientific journals. His mind, however, was not on steam cars. Throughout the next four years he worked on an internal combustion engine, and his second car was completed in 1895. It was equipped with high wheels and half-inch rubber tires.

Running it about the streets of Lansing, he could not fail to attract attention. Lansing, then a community of approximately 10,000 inhabitants, looked upon the young man with mingled

tolerance and pride. Olds, after a year or two, tried to interest capital. For months he was unsuccessful. One of those he approached was A. M. Donsereaux, owner of the town's largest department store. Donsereaux, an excitable extraction of French blood, was hostile to the idea.

"What, and kill myself!" he exclaimed, when Olds invited him to take a ride.

"I am still living."

"Yes, and I will be, too—long after you're dead," predicted the merchant.

Which prediction, by the way, did not come true.

Donsereaux, still vehement, told the story to E. W. Sparrow, a customer of his and one of the leading bankers of the community. Sparrow may have had similar misgivings about the automobile but, being a banker, he had watched Olds at his job of pulling the engine company out of financial difficulties and he had been impressed by the earnestness, as well as the business capabilities of the young man.

Acting on his own initiative, Sparrow influenced Fred L. Smith and Henry Russel, two Detroit capitalists, to put some money into the company. Sparrow added a few thousand dollars on his own account. In 1899, the Olds Motor Works was incorporated with a paid-in capital of $350,000. R. E. Olds was elected president

and general manager, and the factory was moved to Detroit so as to be nearer the labor market.

The company planned, at the time, to sell a car for approximately $1,250. It tried that experiment and lost, in its first year, about $80,000. The public was not receptive to automobiles because it did not consider them practical. Olds realized it was useless to oppose public opinion with the machine and formulated a plan for a one-cyclinder car weighing 500 pounds and selling for $500. He worked it out but didn't quite get the weight, nor the price. The finished car weighed 750 pounds and sold for one dollar a pound—$750. A few were rushed out, tested, and worked so well they were put on the market.

In 1901 they sold 400 and late that year announced a production schedule of 4,000 cars for 1902. It was so incomprehensible that the public laughed. Newspapers were facetious in their comments. Olds, realizing that here was an opportunity to capitalize on public interest—even though it was humorous—called in a young tester.

"Roy, I want you to take a car and drive it from Detroit to New York."

"Yes, sir."

"I want you to start with sufficient time to reach New York for the opening of the automobile show."

"Yes, sir."

"Can you make it?"

"Yes, sir."

The mechanic set out, a few days later, driving the car over the open road. It was the longest trip that had ever been attempted with a motor car in this country. There were no service stations, of course, and strapped to the back of the car was a huge box containing spare parts. Roads, in spots, were almost impassable and near Syracuse the driver was compelled to desert the highway and drive over the tow path of the Erie Canal.

But, he made New York.

Made New York and nearly missed the show. Driving on Fifth Avenue his attention was attracted to another car and he became so interested watching it that he nearly ran down a pedestrian. Jamming on his brakes, he turned the car completely around on the slippery street and crashed into the curb breaking a number of spokes in the wire wheels and narrowly missing serious injuries to himself.

The tester's name was Roy D. Chapin. Less than ten years afterwards he became president of the Hudson Motor Car Co.

Olds was waiting for him at Madison Square Garden—where the show was being held—and pressed Chapin into service in an effort to induce

A. G. Spalding & Co. into accepting the agency for the Olds car in New York. Tentatively the Spalding company agreed to market one hundred cars during 1903 but the directors, after a prolonged discussion, declared such a task impossible and withdrew from the negotiations.

Olds was discouraged but not disheartened. Discouraged, because he believed that if he could put across a big contract in New York, sales problems during the coming year would largely answer themselves. He was not disheartened because, being resourceful, he believed in his product and in the future of the industry. He began casting around in his mind for the name of a good salesman. He thought of different men, mentally tossed aside their names and smiled to himself with "Roy M. Owen" popped into his mind.

Owen had been representing the Olds company in some of its dealings in Cleveland and had as his financial backer Roy Rainey. Both men were attending the New York show. Olds, having made up his mind, sought them out and broached a proposition. Rainey was enthusiastic. So was Owen. Rainey interrupted Olds to say:

"I think we could sell five hundred of those cars."

"So do I," agreed Owens.

Olds gulped, was momentarily flustered; but, only momentarily. Here were a couple of youngsters talking in terms of five hundred cars while he had tried, desperately, to sell Spalding one hundred. Well, if they were joking he, could joke with them.

"Why not make it a thousand and get yourselves some attention?" he smiled.

"Why not?" they agreed, and a few hours afterwards signed the contract.

In 1902 Owens and Rainey sold 750 Oldsmobiles in New York City. They didn't reach the thousand mark; nor did Olds expect they would. But they did succeed in turning the metropolitan district upside down. The company, for its part, was compelled to announce a waiting list—the first time in the history of the industry that such a condition prevailed. The public was beginning to give serious thought to the automobile. Olds was mainly responsible. Already he was the acknowledged leader among the manufacturers. And he was still in his thirties.

In 1903 the Olds company increased its production to ten thousand. At the close of the year the company had a tight hold on the low-price market. There was no question but that R. E. Olds was correct in his diagnosis of what the public wanted; looking back, it is difficult to understand why his associates did not believe as he be-

lieved. They didn't. At the automobile show held in New York in January, 1904, all of them were tremendously impressed by the lines of the foreign models exhibited.

"Let us get into the good field," they said among themselves. They agreed to stick together, went to Olds, and told him of their decision.

"You don't mean 'the good field,' " disagreed Olds. "You mean the high-price field."

They argued over that. They argued over other policies. Olds, losing his temper, threatened to quit. They took him at his word. With him out of the way, they went into the high-price field and promptly lost most of the business that had been built.

Olds, on a vacation with his family in Northern Michigan, was summoned back to Lansing, where the Olds Motor Works had been reestablished two or three years previously. Friends met him at the station and he was told of the organizing of a new company with a capitalization of $500,000. The money had been raised in three hours in a city that had grown to a population of twenty thousand. Nor was it a city of wealth. Olds was offered a controlling interest. He accepted. Thus did the Reo Motor Car Company come into the picture, and Olds became the only man in the industry to be honored by

having two automobiles named after him. The name of Reo was hit upon by using Olds' initials.

This was in August, 1904, and on October 15 the first Reo car was put on the test track. In March, 1905, the company shipped its first trainload of cars.

With Olds, at the Olds Motor Works, was another young man besides Roy D. Chapin. His name was Howard E. Coffin. He was an engineer and already attention was being directed towards him. Chapin and Coffin had grown into close friends and throughout 1905 they planned together on a car Coffin was designing. Chapin, still in his twenties, took upon himself the burden of interesting capital. Deciding that E. R. Thomas was necessary for the completion of their plans, Chapin went to Detroit. He received word that Thomas had gone to California. Chapin went to California. He presented his plan to the millionaire and told him Coffin's design called for an automobile costing less than $3,000. Impressed with Chapin's knowledge of the industry Thomas agreed to furnish the financial backing and, in addition, agreed to merchandise the product through his own sales organization, which at the time was one of the strongest in the industry.

The car, called the Thomas-Detroit, was an immediate success. Chapin, however, was not

satisfied. He felt the price was too high and, working with Thomas and Coffin, succeeded in cutting costs. With this accomplishment he called in his associates and told them:

"We've got to get scientific selling methods back of this product. If we do that, we can sweep the field. If we don't—well, we will just continue being automobile manufacturers."

"Whom do you suggest getting?" they asked.

"Hugh Chalmers."

"You mean that fellow down at the National Cash Register Company?"

"Yes."

"What does he know about automobiles?"

"Nothing, probably. But he knows plenty about selling. That is the important thing for us."

"He's pretty high-salaried, isn't he?"

"Getting seventy thousand dollars a year."

Thomas whistled. Chapin continued: "He's worth more than that. The cash register people admit it."

A few days later Chapin made an offer to Chalmers. It was declined. Chapin made another offer and, with the consent of his partners, told Chalmers the acceptance of it carried a guarantee of a change in the name of the company to the Chalmers-Detroit Motor Car Co. This time Chalmers did not hesitate. In November, 1908,

the Chalmers company succeeded the Thomas-Detroit.

Chapin and Coffin remained with the new organization but a few months. In 1909 they resigned to form the Hudson Motor Car Co.

While Ford, Olds, Winton, and others were building automobiles and companies were being organized to sell them, another man, destined to assume the reins of leadership in a colossal industry, was gazing, for the first time, on this new device which was so greatly to change age-old habits. In later years he was to use, as only a portion of his manufacturing facilities, the factory built for Hugh Chalmers.

His name was Walter P. Chrysler and he was superintendent in the main shops of the Chicago, Great Western Railroad at Oelwein, Iowa. Looking upon the automobile through the wide, fascinated eyes of a young man, Chrysler could scarcely contain himself until he reached Chicago and the automobile show of 1905. Here he saw duplicates of that machine he had examined in the streets of Oelwein. Here he saw other machines—captivating mechanisms made by other men. Here he mused over the future of transportation. Here he languished four days, his attention held by one particular car and his fingers jingling the stray coins he had in his pocket.

A hundred times he approached the booth where the car was being displayed.

A dozen times he asked:

"How much for this automobile?"

Always the same answer:

"Five thousand dollars."

Fingers working nervously, Chrysler finally walked rapidly away and out of the showroom. Crowds in the street jostled him; he jostled back, his heavy shoulders forcing a path towards a telegraph station. He thought of his wife and two children—wondered what his wife would say could she know the thoughts that were whirling, jigsawing inside his head, whipping him out of indecision into decision.

In blunt terms he wired the bank in Oelwein to send him the $700 in the family savings account and then sought out railroad officials he knew to secure their endorsements to his notes for $4,300. With the cash inside his clothes he returned to the automobile show and told the salesman:

"I'll take that car."

The salesman looked at him a bit curiously, saw the money, and hesitated no further.

"Where do you want it delivered?"

"Oelwein, Iowa."

"Why don't you drive it?"

"The roads are bad at this time of year and,

besides, I don't know how to drive," answered Chrysler.

Before the end of the winter, however, Chrysler knew all there was to know about that particular car. The first time he took it apart he put it back together without the misplacement of a bolt or a nut. During the winter he tore it down and built it up seven or eight times. Repeatedly, he told his cronies:

"I can make a better car for less money and some day I will be building automobiles to prove it."

Oelwein was a small town. From one end to the other the residents were neighbors. And the neighbors' wives, were sorry for Walter Chrysler's wife. Across backyard fences and with clothespins in their mouths, they mumbled their gossip:

"Her doing without things and him wasting his money on that fool automobile."

CHAPTER FOUR

An Inventor Was Stalking Them

For years before the coming of the automobile, the history of Detroit had been largely the history of the doings of the Algers, Joys, Newberrys, McMillans, and others in the social structure of the community and state.

Russell A. Alger had been Secretary of War; the Joys had been builders of Detroit; the McMillans had been shipowners, newspaper publishers, bankers; the Newberrys had been in the lumber business since the early days when calked-booted rivermen rode the logs down to Saginaw.

Henry B. Joy, heir to millions, was attracted to the automobile not as other men had been attracted.

It came about as the result of an invitation to some friends to spend an afternoon in a motor boat on the Detroit River and Lake Ste. Claire. The party arrived at the dock where the boat was moored and Joy, springing in, gaily called for all to follow. They did. They remained throughout the afternoon to watch him tinker with the engine—to watch him and to twit him.

Their sallies caused him to invite Truman Newberry, his brother-in-law, to accompany him to New York in search of an engine that would start when requested.

The two sons of wealth and social position visited a New York showroom where steam cars were sold and while they were examining the engine a guage blew out spilling steam and hot water over the place. That settled their minds regarding a steam engine.

Wandering down Broadway they were attracted to two automobiles at a curb. They engaged the drivers in conversation, asked numerous questions, and were leading into the one uppermost in their minds when clanging bells proclaimed an approaching fire company. The drivers left abruptly, turning the switches, spinning the cranks, and were off in a coughing roar in the wake of the fire apparatus.

"See that!" exclaimed Joy.

"You mean the way those motors started?" cried Newberry.

"Yes."

Within an hour Joy had purchased one of the cars. He paid $1,200 for it and gave an extra $100 for immediate delivery. From this incident grew the Packard Motor Car Co.

Joy's interest in mechanical things spread from the motor boat, which had been a toy, into

automobiles. He made frequent trips to Warren, Ohio, where J. W. Packard and his brother were manufacturing the car and during one of these trips Packard confided:

"If we could build two hundred of these machines next year I am sure we could sell them."

"I believe you could," agreed Joy.

Packard smiled. "I'm glad to hear you say that. I mentioned it to some bankers and they agreed as how I was crazy."

"What do bankers know about the automobile business?" asserted Joy, in the wisdom of youth.

"They loan the money."

There followed a discussion of finances, equipment, location, and other items which come into the problem of manufacturing. As a result Joy invested $25,000 and declared he would return to Detroit and get what additional capital was needed. The company was then known as the Ohio Automobile Company and young Joy, brimming with enthusiasm, appealed to his friends and soon had a subscription for the required amount.

On October 13, 1902, directors in the Ohio Automobile Company voted to increase the capital stock to $500,000 to provide for shares issued to its Detroit investors, to change the name to the Packard Motor Car Co., and to move the plant to Detroit. The story of the Packard car,

however, goes back years before that. Although the first car was not completed until November 6, 1899, the building of an automobile had been planned by J. W. Packard and W. D. Packard in 1893. In that year they had drawings made but they did not go ahead with the manufacturing because of the widespread business depression.

In 1899 J. W. Packard bought an automobile from Alexander Winton and quite a number of peppery disputes followed between the two men as to how an automobile should be made. One day Winton lost his temper and barked:

"If you know so damned much about an automobile, why don't you build one?"

Packard vowed he would. It was a one-cylinder car. The production of this car continued, with minor changes, until 1902 when Joy and his friends became financially interested. Three cylinders were added, somewhat to Packard's disgust.

"Heavens to Betsy, aren't we having enough trouble with one cylinder!" he protested.

In 1903 the company built 200 cars, and during the same year E. T. Fetch made the first transcontinental trip in an automobile. He drove the "Old Pacific"—a Packard—from San Francisco to New York City in 53 days. At one point the crew mutinied and declared an inten-

tion of choosing the route to be followed. The officials responsible for the tour outguessed the disgruntled drivers by wiring expense money only to those towns through which the run was to pass.

In the first year of operation in Detroit the concern lost $400,000. Money was badly needed, and Joy went to Joseph Boyer, one of the men he had influenced into making an initial investment. Boyer was amused, satirical.

"What was it you said about planning to make four hundred cars next year?" he inquired.

"I said in order to make that many we would need more money," repeated Joy.

"If we lost four hundred thousand dollars in making two hundred cars this year, it needs no mathematical mind to calculate that four hundred cars means a loss of eight hundred thousand dollars. Not me. I'm through."

Boyer sold his stock to the Algers for something like fifty cents on the dollar. Had he kept it he would have been wealthier by at least twelve million dollars. Perhaps, though, that is unimportant. He built up a fortune in the Burroughs Adding Machine Co.

Troubles, other than financial and manufacturing, were coming in on the Packard company. Having definitely gone into the business of building gasoline cars, the investors found themselves

in precisely the same position as other producers of similarly propelled vehicles. George Baldwin Selden, inventor and lawyer of Rochester, New York, was stalking them.

Selden, on May 8, 1879, had applied for a patent covering a machine containing essential principles of an automobile. Versed in the ways of the law and visioning the tremendous possibilities of his invention, Selden kept the application in force although accomplishing nothing in the way of practical use. In fairness to him it may be written that he did try to interest various manufacturers but was unsuccessful. He was shrewd enough, however, to keep in close touch with the patent office through the following sixteen years and on November 5, 1895, formally took out a patent.

By this time there was concrete evidence of the gathering interest in this new method of transportation. Winton, Ford, Duryea, Olds, and others were experimenting. Capital was being attracted. Selden, from his home on a side street in Rochester, watched the developments and bided his time. It cost him nothing to keep the game under his sights, so to speak. Vague, disturbing rumors floated through the young industry that a patent was being violated, but with passing months and inaction on the part of the mysterious patentee the pioneers grew bolder.

Selden was pleased. A sickly boy, he had grown into crotchety maturity. As said, he well knew the value of what he had and, for that matter, so did other persons. One person, in particular. William C. Whitney, an eastern capitalist, entered into an agreement with Selden on November 4, 1899, under which exclusive rights to the patent were secured. Whitney, through gradual purchase, then acquired control of the Electric Vehicle Company, thereby bringing himself more actively into the automobile picture.

With the Selden patent in his possession, a vigorous enforcement of its claims was started. A complaint alleging infringement was filed against the Winton Motor Carriage Co., of Cleveland, Ohio. The Winton company fought the suit and lost the decision in the United States District Court. An appeal was taken—probably as a matter of form, for the Winton company, judging by a later action, apparently had no hope of winning a reversal.

This action consisted of banding together, with nine other companies, in a signed agreement to form an Association of Licensed Automobile Manufacturers. The right to use the Selden patent was the cornerstone of the association.

The members agreed to pay one and one-quarter per cent royalty of the retail price of all cars sold by them. This percentage went to the Electric Vehicle Company and it, in turn, refunded two-fifths of the sum to the association. In addition, it had an agreement with Selden under which he was to realize a certain percentage of the amount paid to it.

Royalties soon became burdensome, and Henry P. Joy led a fight against them. Joy was so vigorous in his denunciations that the royalty was cut to one per cent and later, when Joy threatened a second revolt, it was reduced to four-fifths of one per cent. A third dispute arose and it was finally set at a fixed sum of $150,000 a year and the remainder was placed in the general fund of the association.

While other manufacturers were banding together and paying tribute for protection, there was one company, less than a year old, that was evidencing a pugnacious spirit. The company was the Ford Motor Co., and its guiding hands—Ford and Couzens—refused to pay anything to Selden, Whitney, or any other person claiming to have priority rights in an automobile.

One day Fred L. Smith, president of the Oldsmobile company and, also, president of the Association of Licensed Automobile Manufac-

turers, met Ford, Couzens, Anderson, and one or two other executives of the Ford Motor Company. The meeting was held in a room in the old Russell House, in Detroit. Smith was there for the purpose of whipping the company into line. He presented the case of the Selden backers, as well as the position of the association, and sat down to await an answer.

It came:

"Selden can take his patent and go to hell with it!" roared Couzens.

Ford, who had been dangling in a chair tilted against the wall, rapped out:

"Couzens has answered you."

"You men are foolish," counseled Smith. "The Selden crowd can put you out of business—and will."

Couzens laughed unpleasantly. Ford, standing up, pointed a finger at Smith and cried:

"Let them try it."

The meeting broke up.

Threats came through the mails and into the Ford offices. Advertisements were published informing Ford owners of "their liability for driving a Ford car," compounding an infraction of the patent, as it were. Couzens then wrote a letter to the Editor of the *Cycle and Automobile Trade Journal* explaining the position of the Ford Motor Company. That letter lighted the

fuse to the bomb which, when it finally burst, obliterated the Selden claims.

In part, it follows:

"In regard to our position with regard to the Selden patent situation regarding the various statements which thus far have been made by the Selden Association we have this to say:

"So far as our plan of action is concerned for the future it is extremely simple. We intend to manufacture and sell all the gasoline automobiles of the type we are constructing that we can. We regard the claims made under the Selden patent as covering the monopoly of such machines as entirely unwarranted and without foundation in fact. We do not, therefore, propose to respect any such claims and, if the issue is forced upon us, shall defend not only ourselves but our agents and customers to the fullest extent and this, too, without regard to whether or not we join any combination for the purpose of defending this suit.

"In taking this stand we cannot conscientiously feel that Mr. Selden ever added anything to the art in which we are engaged. We believe that the art would have been just as far advanced today if Mr. Selden had never been born. That he made no discovery and gave none to the world. If he did, it was a narrow and impracticable one having no value, and that he and his assignees cannot monopolize the entire trade by forcing upon it unwarranted construction of his claims by those interested in sustaining them.

". . . A purported interview of a representative

of a certain eastern paper published in Hartford, Conn., with the patentee, George B. Selden, is published, and copies thereof have been mailed from New York to us, and other parties have received them from the same source with this interview marked. . . .

"In this interview Mr. Selden is made to say, among other things, that the question of invention has been entirely foreclosed by the decisions of the United States courts; that a preliminary injunction would be granted upon merely proving infringement; that the court would never hear any arguments of evidence tending to show that the patent was invalid.

"We are informed by the highest authority that these statements are absolutely false. That the courts never regard consent decrees of any value whatever in establishing a patent, and that they would form no basis whatever upon which claims for a preliminary injunction could be made.

"The same authority states that every reputable lawyer in the United States, engaged in the practice of law, knows this principle.

"A large number of advertisements have been published in which it is claimed that the Licensed Association members are pioneers in this art. They do not say, explicitly, they are pioneers, but that is the inference. As we know to our certain knowledge, a number of the members are not pioneers in any sense of the word whatever; some of them began the manufacture of such machines within the last year. Our Mr. Ford is one of THE pioneers, as he built the third gasoline automobile machine in the United States; therefore, the

inference sought to be conveyed that only the licensed manufacturers are pioneers, and especially the statement that each and all of them are pioneers, is not true.

". . . *It is further claimed that they are making ninety per cent of the gasoline automobiles. We are not now in a position to state whether this is true, or not, but we are endeavoring to do our level best to reduce the per cent.*

"In the same article, taken from the supplemental number of said paper, it is alleged that specific defendants after spending a large amount of money in stubbornly contesting the case have joined the Association, with the implication they have seen the futility of defense. We have it from the best authority that the Association, itself, by its contract with one of these parties, refunds, or pays by remission of dues, all of the expenses incurred by it in defending itself against the Selden patent.

". . . In stating our attitude with regard to these mendacious statements and the position of the Selden Association before the automobile public we are confident that we are not only voicing the opinion of ourselves, but of all the outside concerns, in saying that they do not inspire us, nor the outside concerns, with any degree of confidence in the equity of the Association or in the bona fidaes of their claims.

"If sued as to defenses:

"First—all the defenses heretofore set up in any of the cases that have been compromised are just as available in any new suit as they ever were in any of the old ones.

"Second—our attorneys have matter which is very material to a defense which has not been set up or shown in any case, and we do not believe it has been considered by any of the attorneys that have acted in behalf of the Selden patent.

Yours truly,

J. Couzens, *Secretary.*"

The publication of this letter brought action, as Ford and Couzens had expected it would. Suit was instituted against the Ford Motor Company for infringement and an original suit was filed against C. A. Duerr & Company, Ford agents in New York City. For years, the introduction of evidence dragged along. Volumes were compiled, and submitted, until in June, 1909, the case was set in argument before the Circuit Court of the United States, Southern District of New York. In September, three months later, Judge Charles M. Hough rendered a decision sustaining the Selden patent.

Ford and Couzens, while dismayed, were far from beaten. There were higher courts. They took an appeal and protected users of Ford cars by depositing a bond with the court to cover damages to the complainants until such time as a decision could be rendered in the United States Circuit Court of Appeals.

They built additional defenses. They had gained public sympathy and this sympathy ex-

pressed itself in orders for thousands upon thousands of cars. Looking ahead, the specter of contributing millions upon millions of dollars to Selden, and his assigns, frequently shook the confidence they had to do business as they wished. Other manufacturers, while morally supporting them, had, cannily, withdrawn financial support.

On a little thing—apparently an inconsequential thing—the foundations of the complainants' case shook . . . and collapsed.

While the case was being tried in the United States Circuit Court of Appeals a notebook and diary of Selden's were introduced. In his diary Selden disclosed he had examined what was known as an Otto four-cycle engine.

For he had written:

"That is another of those damned Dutch engines."

The Otto engine had been built before Selden's application for a patent had been filed and the court, it is presumed, considered—from this scrawled notation—that Selden never had any intention of using the principles of this type of motor; that his claims described an engine known as the Brayton type.

In January, 1911, a decision was rendered which sustained the validity of the Selden patent—*and, also, that Ford was not infringing with his motor.* Ford, and practically all other

manufacturers of automobiles, was using a motor of the Otto principles which were different, in some respects, from the model designated and designed by Selden.

The importance, to automobile manufacturers, of this court victory can scarcely be overestimated.

Immediately they stopped paying tribute. Ford, unforgiving because in his time of need support had been denied him, refused to join the Association which continued in another form. Not until January, 1928, did he again mingle, publicly, with his rivals in business. At this time, he was guest of honor at the annual banquet of the manufacturers held in New York City.

However, although a guest of honor, he again refused to join the Association, although he has been indirectly a member ever since he took over the ownership of the Lincoln Company.

CHAPTER FIVE

Men Are Not Inspired Seers

He had known nights when, under the flicker-sputtering, droning arc of an oil lamp, he had stood on the end of a medicine wagon and hawked his cure-all to gaping, gullible, beet-necked farmhands. He had been an errand boy for a grocery, a common laborer in a mill, a clerk in a cigar store, a salesman for a municipal water works.

Chancing one day to get a lift in a two-wheeled road cart, his curiosity caused him to examine the vehicle. It was a light, inexpensive contraption, and his mind, already turning to transportation, was satisfied there was a wide market for this vehicle. He wasted little time in getting to Coldwater, where the cart was manufactured, approaching the builders and closing a proposition under which he was to pay $2,000 for the business.

With this much accomplished, a single difficulty remained getting the two thousand dollars.

Back to Flint he went. Approached a friend,

persuaded him to put up $1,000, returned to Coldwater and cajoled the owners of the small business into accepting the money.

"We will pay off the other half within a few months," he promised them.

His partner was J. Dallas Dort and the firm was reorganized as the Durant-Dort Carriage Co. William Crapo Durant took charge of the finances and sales while Dort supervised the manufacturing end of the enterprise. Durant, then about twenty-five years old, displayed a measure of the wizardry of figures, and of men, that was to be so completely recognized a few years later. With Dort he was soon to monolize the carriage making industry of the United States.

Wise men know they must not anticipate a glow of gladness in the accumulation of things; men wiser still know there is little in the process which entitles them to approval or applause. A flicker of that knowledge must have come to Durant in those days of his youth.

A wizard of finance yet he saw his business taken away from him—time and time again.

A genius at picking men—yet he saw those men forsake him.

But he built up the carriage business within a very short time to the point where the Durant-Dort company owned fourteen plants in the

United States and Canada and had an annual production of 150,000 vehicles.

No mere wave of the hand did that. Durant worked and planned and made his work and his plans come true. To show how he worked, there is the story of a trip to the Pacific coast in search of suitable timber to be used in his carriages. Securing a horse and buggy in San Francisco, he drove up through California and Oregon and into Washington. From dawn to dusk, day after day, week after week, over little-traveled roads and through a sparsely settled country, but he found that which he sought.

At the end of his trip, he had just enough money to buy his railroad ticket back to Flint, with a few dollars on the side for meals. He could not afford to eat regularly so at station stops of five or ten minutes' duration he would leap from the train, scurry to a restaurant, bolt a cup of coffee, grab a couple of sandwiches and rush back to his day coach.

Reaching Chicago he had three quarters and a dime rubbing against each other in his pocket. A wait of an hour faced him in changing trains, and an empty stomach clamored for attention. Carrying his bag so as to save the ten cents it would have cost him to check it, he wandered about the streets in search of the cheapest eating

place. Splashed across the window of a restaurant he saw a sign:

OYSTER STEW—25 CENTS!

He climbed on a stool, ordered one stew and then a second one. It was the first hot food he had eaten in days. He gulped it so fast that laws of digestion must have been grievously offended. But the blind Justice administering those laws was kind. His stomach retained the food.

When paying his bill, he threw down the ten-cent piece and told the cashier to give him a cigar. This he carefully stowed away, returned to the station, again boarded a day coach and was on the last lap of his journey. Arriving in Flint he hired a cab driver to take him to his mother's home, tossed him the last quarter when he drove up in front of the house, and then lighted the cigar. His mother met him when he was halfway up the walk, folded him in her arms, and heard him laugh:

"Well, mother, I'm back home and broke."

A few minutes later he was at the kitchen table and eating as only a half-famished young man can eat.

That was William C. Durant who, in 1903, was to gain control of the Buick Motor Car Co.; who was to consolidate that business with the

Cadillac, Oakland, and Oldsmobile companies and to organize the General Motors Company in 1908.

September 16, 1908 . . . and here are some of the news events of that day as reported in the *New York Times*:

President Theodore Roosevelt was in a jovial mood. "Bully!" he cried when reporters told him that Charles Evans Hughes had been nominated for Governor of New York state on the Republican ticket. . . Mike Donovan, an athletic trainer, was on his way to the Roosevelt home at Oyster Bay and when approached by newspaper men he vowed: "I am going to write a book on Teddy—he deserves it!" . . . Justice Davis decided against the city in its case against an autoist who had been arrested in Central Park the preceding December 16: "The charges against this man is driving with skid chains and the law does not prohibit their use," declared the Court. . . The White Star Company announces the construction of two new ocean liners, the keel to one ship is now being laid and it will be called the Olympic; the keel to the second ship will be laid later and it will be called the Titanic. . . New Jersey had a flyer who was critical of the Wright aeroplane as compared with his own; Wilbur Wright remained in the air over LeMans, France, for thirty-nine minutes and broke distance records by flying twenty-six miles . . . Jack Johnson and Tommy Burns were matched for the heavyweight championship of the world and agreed to fight in Sydney, Australia.

There was no mention of the organizing of General Motors. As a matter of fact, there was little reason for its being mentioned. The orginal capitalization was only $2,000 although, within a few days, it was increased to $10,000,000. William Crapo Durant was president.

It was the same Durant who, in 1909, was to bid for the purchase of the Ford Motor Company and was to see his bid fail when bankers refused to loan him $8,000,000 because, as they said:

"The Ford business isn't worth that much money."

The recital of that proposition concerns, in some of its phases, one of the authors of this story. The recital also verifies the thought that no man can know how great his business, or he, may grow. In *The Sword Arm of Business* written by Theodore F. MacManus, this presentation was made:

"The incident has probably faded from Ford's memory. Even if it has not, he would be justified, according to the modern law which exempts diplomats and big business men from remembering unpleasant events, in having a sudden lapse in his recollections. The facts, however, in so far as the author had anything to do with them as facts are:

"In those trying days Durant thought, or pre-

tended that he thought, or tried to persuade himself that he thought that the Banking System was a Heartless Monster—all in large capital letters, after the method of the still somewhat wild and woolly west. There was a latent idea in his mind, I believe, that the Monster might be wounded, or crippled, or even slain by astute publicity.

"For the most part, however, the association was largely that of speaker and listener, with the publicist enacting the rôle of Respectful Silence. On the day in question, Silence had become burdensome. There had been several days and nights of it, the Saturday noon hour had arrived and all the employees of the General Motors Company at Flint had departed, leaving the Big Little Man (Durant) and his faithful neophyte, the author, in full possession.

"The latter attempted to register a gesture of escape with the usual mumbling reference of 'if-there-is-nothing-more-to-do!' But Mr. Durant would not have it that way, so from 1 until 6 P. M., the job of working and waiting went on. Meanwhile the Listener became a Thinker and fastened his thoughts on Mr. Durant's dilemma—the certainty that within a few weeks, Somebody or Something would rap him on the wrist and break his hold on the ownership of General Motors.

"As Mr. Durant was about to step into his car on the way to dinner a suggestion was made:

" 'Mr. Durant, will you permit me to say something which is intended to be helpful but may sound like an intrusion into your private affairs?'

" 'Go ahead.'

" 'Has it ever occurred to you that when a man's credit is threatened with impairment it sometimes helps, immensely, if he can contrive in some way to buy a property of known value?'

" 'What do you mean?'

" 'Just what was said.'

" 'What property could I buy if I were able?'

" 'The Ford Motor Company.'

"Durant laughed in derision. 'I couldn't buy the Ford business.'

" 'How do you know you couldn't?'

" 'How do you know I could?'

" 'It was mentioned to me.'

" 'By whom?'

"A name was passed. Durant grew excited. 'Can you make an appointment?'

"The appointment was made."

A few days afterwards Henry Ford and James Couzens were at the Belmont Hotel, in New York City. They were together in their room and Ford, suffering from lumbago, was

lying on the floor because there was no comfort for him in bed. The telephone bell jangled and Couzens, picking up the receiver, heard a voice:

"Jim Couzens?"

"Yes."

"This is Billy Durant. I'd like to see you."

"What about?"

"I can tell you when I see you. I'd like to see Ford, too."

Couzens turned his head but Ford muttered: "I don't want to see anyone. You do the talking."

"Mr. Ford isn't feeling well," said Couzens to Durant. "But I can see you downstairs if it is important."

"It is," responded Durant. "I will be there within five minutes."

Returning upstairs within a half hour Couzens sat down, eyed Ford who was still lying on the hard floor in a vain effort to rest, and said:

"Billy Durant wants to buy the Ford Motor Company."

"How much will he pay?"

"Eight million dollars."

"All right. But—*gold on the table*!" snapped Ford.

"How do you mean that?"

"I mean cash. Is he still downstairs?"

"No. I told him to come back tomorrow."

Durant came back the following morning, and Couzens delivered Ford's message. The two men shook hands on the proposition and Durant left to raise the necessary money. With him he had a résumé of the Ford business and its prospects. The capital stock of the Ford company was $2,000,000 and it had a surplus of $1,180,000, exclusive of goodwill and patents. Its earnings in 1908 were $2,684,000 on a business of $9,000,000 and it was planning to do a business of $15,000,000 in 1909 including an output of 21,000 automobiles. Durant had reached an agreement with Couzens to pay $2,000,000 in cash and the balance in one and two years.

On October 26, 1909, Durant received the sanction of his board of directors for the acquisition of the Ford business, went back to his bankers and was informed:

"We have changed our minds. The Ford business is not worth that much money."

Within a year Durant was to lose control of General Motors.

Couzens has since said that "Ford really wanted to sell. He was sick in body and disturbed in mind. The Selden patent suit had worried him. He had money enough to retire, in comfort and in piece, and be a gentleman farmer."

The transaction came awfully, awfully close

to being completed. Perhaps, in the last exchange, Ford would have refused to release that which he held. Perhaps. But men are not inspired seers. They cannot gaze down the years and see their own destinies unrolling. The most they do—even in rare and exceptional men like Ford—is to hope and plan . . . and keep on working.

CHAPTER SIX

Sleepless Nights—Despondent Days

It was apparent, even in the years between 1900 and 1910, that the time would come when control of the industry would be in the hands of a few large organizations. Young companies, all, they struggled to get rooted in the soil of public opinion that their futures might be assured.

Every one of those pioneers experienced the process of sleepless nights and ringing in on the time clock of despondent days. They survived because they never lost faith in themselves. John North Willys was one of them.

Willys was owner of a sporting goods store in Elmira, New York, and was on a business trip to Cleveland in 1900 when he saw his first automobile. His companion was Gus Boyer, sales manager for a bicycle manufacturer Willys was representing. The car they saw was a Winton. Running to the curb, Willys hailed the driver, asking him to stop.

"Can't do it," yelled back the stranger. "Might not get her started again."

Looking after the chugging machine, Willys enthused:

"That's the business for me."

"Shucks!" exclaimed Boyer. "Those things haven't a chance with horses and bicycles."

Returning to Elmira, Willys learned that in his absence a doctor had purchased a Pierce Motorette—a small car with a De Dion motor on the rear axle. He investigated and the following day went to Buffalo, met Colonel Charles Clifton, president of the Pierce-Arrow Company, and asked for the agency for the car.

"Not right now," returned Clifton. "We are just experimenting. We do not know that the car will be a success."

Willys was insistent. Clifton finally capitulated and agreed to sell him the next car manufactured. The first year he had the agency Willys sold two machines; the following year he sold four, and then secured the agency for the Rambler. In 1903 he disposed of twenty automobiles and in 1904 and 1905 increased his sales to a point where he could not get deliveries. In 1906 he entered into an agreement with the Overland company, then in Indianapolis, to take their entire output in 1907. The output consisted of 47 cars. In the fall of 1907 he increased the order to 500 cars and paid down $10,000 in binding the deal.

On the way back to Elmira he read in a newspaper that the Knickerbocker Trust Co., in New York City, had gone to the wall. This failure contributed, in a large way, to starting the "panic of 1907." The entire country was soon involved. Willys nervously awaited developments. They were not long coming. Word came that the Overland company was in financial difficulties and the day following Thanksgiving, 1907, Willys went to Indianapolis. He arrived on Saturday morning; at the plant he was greeted by the manager:

"I've got some bad news for you, Mr. Willys."

"What is it?"

"We are going into the hands of the receiver Monday morning."

"You are not!"

"Nothing can prevent it. As a matter of record, we paid off our crew today and we haven't enough money in the bank to meet their checks Monday morning."

"That's a damned, rotten thing to do," stormed Willys. "You've got to make good on those checks."

"How?"

"How much are you short on the payroll?"

"Three hundred and fifty dollars."

"I'll get it."

Willys went to the Grand Hotel and gave the

clerk a check for three hundred and fifty dollars. The clerk refused to cash it. Willys then sought the proprietor and was told that the banks had shut down on cashing "out-of-town" checks, protecting themselves by demanding several days' notice before meeting payment. Willys took the proprietor into his confidence, telling him the money was badly needed to pay the employees of the Overland company. He sold the proprietor the idea of cashing checks for no one until the three hundred and fifty dollars had come into the dining room or across the bar. At midnight, Sunday, the proprietor came to him and informed him the money was ready.

On Monday morning Willys was at the bank when it opened. Plunking down a sackful of money he ordered:

"Deposit this to the credit of the Overland company."

"Who are you?" interrogated the teller.

"My name is Willys. I'm from Elmira, New York. I'm a customer of the Overland company. They've got ten thousand dollars of my money made as an advance payment for automobiles. I'm here to protect that investment."

The teller refused to accept the deposit. Willys went to the cashier. Explained. Pleaded. Threatened. Finally, the cashier acquiesced but adviced:

"You're just sending good money after bad, Mr. Willys. The Overland company has been in a bad way financially for some time. It can't pull out."

"It will pull out," pledged Willys, and walked out of the bank leaving the sack of money on the cashier's desk.

Going to the plant, he met officials of the company and talked them into giving him a vote of authority to do what he saw fit in meeting the payroll of the following Saturday. That was the first step—getting the men back to work. For five weeks Willys did little but ride trains and buttonhole everyone he knew. He kept meeting payrolls and kept the plant working. He talked with suppliers and induced them to send materials. He pleaded with friends and succeeded in getting a little money. Not much—but enough to keep the wheels from stopping altogether.

The day came when he received word from Indianapolis that the creditors were refusing to be put off any longer. The company owed $80,000 and an ultimatum had been issued:

"Pay or quit!"

That same day Willys went to E. B. Campbell, a lumberman of Williamsport, Pennsylvania, and succeeded in getting the half-promise of a loan of $15,000. He agreed to repay the

loan if the Overland company failed. Then he approached the creditors' committee and made them a proposition to pay ten cents on the dollar, in cash, and the balance in instalments. These instalments were to go to those insisting upon them; otherwise, their claims were to be counterbalanced with stock in the Overland company.

"Where is the cash?" they asked.

"I have no intention of paying it today," responded Willys. "This meeting is for the purpose of learning your intentions. The cash will be here tomorrow."

Late that afternoon Campbell told Willys he had decided against investing in the Overland company. "I have investigated the company and have reached the conclusion there isn't a chance for it to pull out," he said.

"But I'll personally guarantee the loan," pleaded Willys.

"I don't want you to be in debt to me. It isn't fair to you. Besides, I'm trying to protect you."

"I'm of age," grumbled Willys. Went on pleading.

Campbell finally advanced $7,500. Willys returned to the creditors' meeting the following morning and told them the exact amount of cash he had raised. They wailed and they stormed

and they swore. But Willys had his way. "This agreement I have here," he said, indicating a written document before him, "calls for payment, in cash, of a sum not to exceed fifteen thousand dollars. That is your agreement. The terms, under the settlement I made yesterday, and to which you agreed, called for ten per cent down, or a maximum of eight thousand dollars. I have here seventy-five hundred dollars. If you go easy, there is enough money and a chance to get the company back on its feet. If you don't . . . well, figure out for yourselves what you will get."

The important creditors fell into line. A vote was taken. The majority voted to accept preferred stock in lieu of cash. To the others cash was paid. Of the $7,500 Campbell had loaned, but $3,500 was needed to meet immediate claims. As this was distributed the meeting broke up. The creditors were beginning to leave. Not until then did Willys play out his hand.

"We haven't considered the most important business before us," he observed quietly.

"What's that?" they chorused.

"The future of the Overland company."

A few creditors shut the door quietly behind themselves; others remained.

"Inasmuch as our ability to pay dividends depends upon the sale of product we are going to

need supplies to make that product," said Willys. "Our success is dependent upon you. Will you sell to us on regular ninety-day terms?"

They agreed.

"Furthermore, we are going to need credit from other concerns. To get this credit we will be compelled to use your names as references. Is that agreeable?"

It was.

In January, 1908, Willys was made president, treasurer, general manager, sales manager, and advertising manager of the Overland company. There were other titles but he had no use for them. The company, in the ensuing eight months, manufactured, and sold, 465 automobiles and made a net profit of $58,000, after having taken care of all its outstanding indebtedness.

John North Willys, a salesman, was beginning to attract attention.

Little known then, little known now, Charles D. Hastings was another who was spending nights working when he should have been sleeping and days worrying when others could have shared the load.

Hastings attended training school in the automobile business by being with R. E. Olds in the early days of that organization. When Roy D. Chapin left to go with E. R. Thomas and organize the Thomas-Detroit company, Hastings fol-

lowed. While here he renewed an acquaintance with Robert Hupp, an engineer.

Hupp was experimenting with a car of his own design and three men—J. Walter Drake, Joseph R. Drake, and John E. Baker—had financed him to the extent of $3,500. Enthusiastic over what he was creating Hupp invited Hastings to go for a ride. As they concluded a short trip, Hastings, interest aroused, began asking questions. Hupp answered them as best he could. Hastings' interest carried him into meeting the associates of the engineer.

"I'd like to come with you," he proposed.

"We'd like to have you," they agreed. "But our financial position is such that we can't afford it."

"Let me worry over that."

"You mean the finances of the company?"

"Yes."

They were willing. That was later in 1908. The Detroit Automobile Show was a few weeks off, and if the company was to succeed a model had to be ready. Showing the car and getting dealers were the two essentials.

What a night that was—that night before the show. So cold it stopped snowing. The wind hammered against the sides of the shack in which two men were working. Hammered against the sides of the shack, swept through the cracks and

crevices—made useless a puny fire in a small stove. The two men, in cramped positions, tired almost to the point of exhaustion and half frozen, worked through the night. Sheer courage was all that kept them at it. As the last bolt was tightened Hupp, in a hoarse voice, croaked:

"Turn off the lights, Charlie. It's daytime."

Hastings looked at his watch. It was fifteen minutes to seven.

They polished the car and a few hours later followed it out of the cold, dreary crudeness of its birthplace and into the tinsel and glitter of the show. As they watched it being wheeled into place, Hastings asked:

"How much to you suppose we have left out of that thirty-five hundred dollars?"

"Not much," guessed Hupp.

Hastings forced a grin. "Less than that," he said, just as ambiguously.

"What are we going to do?

"We are going to be frank with the dealers. I have worked out a plan."

"What is it?"

Hastings explained. Hupp was silent for a moment. Placing his arm about his companion's shoulders and murmured: "I'm betting on you, Charlie."

Hastings studied dealers and they, in turn, studied the car. He sorted them, mentally;

talked with them and sensed their enthusiasm—finally broached his plan:

"Gentlemen, we have spent practically every cent we have in making this model. It's the best car we know how to build. We can manufacture it under but one condition. Every car you order demands a cash deposit of fifty dollars. We will expect the balance to be paid when you receive the finished cars. I am stating our position and I am stating it frankly and honestly. There is no other way for us to get into production."

Hastings' frankness won confidence. Five hundred cars were sold and the company got an immediate working capital of $25,000. It built the machines. It made deliveries. About this time Edwin Denby, who in later years was to become Secretary of the Navy, acted against the advice of his friends. He borrowed $5,000 and invested it in stock in the company. Denby's investment brought the original cash deposited in the company to $8,500.

So started the Hupp Motor Car Co., under the guidance of Charles D. Hastings. So it continued, for nearly twenty years.

CHAPTER SEVEN

Forces That Were Uncompromising

While Durant, Willys, Ford, Hastings, and others were reconnoitering in desperate attempts to remain in business, still others were just as desperately seeking ways and means for getting out—and getting something for getting out.

The crushing process was being applied. The "panic" of 1907 took heavy toll; the financial roller of 1908 flattened out many more, and in 1910 the winds of speculation scattered all but the sturdiest across the far horizon. Tiny bits, these losers had become involved, willy-nilly, in forces that were uncompromising.

One of those getting out in a prosperous way was the Elmore Motor Car Co., of Clyde, Ohio.

The two brothers who owned this business were sitting with a third person of a Saturday afternoon. Through the hours they had talked of the future of the industry and at the conclusion this remark was made:

"Why don't you people sell out?"

One of the brothers wrinkled his nose, spat in the direction of the nearest cuspidor and asked:

"Why?"

"Because you're going to get squeezed. The sensible thing to do is to get out while the getting is good."

"Who would buy?"

"Hard to say. Durant might. He's buying everything he can get his hands on."

"How much do you think this business is worth?"

"Half a million dollars."

"We'll sell for that."

"No, you won't. You'll sell for five hundred and fifty thousand."

"What's the extra fifty thousand for?"

"For me—for selling."

On Monday morning a telephone rang. It was answered. There came a strange voice:

"Is this Theodore F. MacManus?"

"Yes."

"My name is 'so-and-so.' I understand you have an option on the Elmore Motor Car Co."

"No."

"That's strange. I heard it, on good authority, not more than two hours ago."

"Your information is incorrect. I have no option. I have a bill of sale. Which is much better than an option, as you will admit."

"Guess you're right. How would you like to sell?"

"To whom?"

"William C. Durant."

"Does he want to buy?"

"Will you talk with him if he does?"

"Certainly."

"I'll call back within a half hour."

The telephone bell rang again in less time than that. The same voice was once more on the wire.

"Mr. MacManus, can you go to Flint and see Mr. Durant at eleven o'clock tomorrow morning?"

"Yes."

Before noon the following day the Elmore Motor Car Co., was in possession of Durant. It was sold for $550,000. Durant, in November, 1909, turned around and sold it to General Motors for $600,000. Which was an inkling, to one person at least, that considerable money could be made in business if that person could but know his way around.

It may sound a trifle strange, in view of the proportions to which he has grown, but there was another who was beginning, in those years between 1903 and 1910, to find out how much money could be made in business. His name was Henry Ford.

Of necessity, any story of the automobile industry must confine itself, in a fairly large way, to Ford. His rapid rise into the possession of

a billion, or more, dollars has thrown a glamour about him . . . a glamour which instead of bringing into relief many important facts concerning his business has subdued, or stifled, them.

Ford, in his published utterances over the years, has indicated a suspiciousness of financiers and bankers. Durant, as has been indicated in an earlier chapter, was another who nursed similar suspicions. Yet, in spite of his published utterances, it is difficult to understand how Ford could have built his business into its gigantic proportions without the assistance of bankers, and financiers.

James Couzens, starting out as a bookkeeper, became a financier. John S. Gray was a banker. William Livingstone was a banker. Directly, you shall see how these men fitted into the Ford picture. And, there were others.

Ford, in his book entitled *My Life and My Work*, had this to say:

"I determined, absolutely, that never would I join a company in which finance came before the work or in which bankers, or financiers, had a part.

". . . In the beginning [he was referring to those days when the Ford Motor Company was organized] I thought it was possible, notwithstanding my former experience, to go forward with a company in which I owned less than a controlling share. I very shortly found out I had to have control and, therefore, in 1906,

with funds I had earned from the company, I bought enough stock to bring my holdings to fifty-one per cent, and a little later bought enough more to give me fifty-eight and one-half per cent. The new equipment and the whole progress of the company have always been financed out of earnings."

The beginnings of the Ford Motor Company have been told—how Malcomson, Ford's financial backer, sought out John S. Gray and influenced the banker into subscribing $10,500, in cash, for stock in the Ford Motor Company. In addition to being a banker, Gray was president of the Ford Motor Company from the day of its incorporation until his death on July 6, 1906.

Soon afterwards Ford and Couzens decided to withdraw their banking connections from the German-American institution, which Gray had headed, and transfer their account to the Dime Savings Bank, of which William Livingstone was president. The reason for that decision can be told this way:

Malcomson was off to one side, engaged in the process of organizing a new automobile company and upon learning of this move Ford decided to secure control of the stock in the Ford Motor Company. He made known his wishes to Couzens. The latter, in turn, approached Malcomson and after some dickering secured an op-

tion on his stock—which was 25½ per cent of the total—for $175,000.

To meet this sum Ford signed three notes for $25,000 each and, in harmony with Malcomson's wishes, Couzens endorsed each note. Ford and Couzens then went to Livingstone and borrowed $100,000. Because this amount exceeded what the bank was authorized to loan, it was divided between Ford and Couzens, each endorsing each other's note while Ford used the newly-acquired Malcomson stock, as well as his own, as collateral. These loans were paid out of dividends.

Having secured Malcomson's stock, Ford and Couzens then approached Strelow, Bennett, Fry and Woodall. Offered them a proportionately similar sum to what they had paid Malcomson—a ratio of approximately seven for one, or, in round figures, $110,000—and in this deal no borrowing was necessary; the stock was paid for in cash out of money the two men had earned in the company.

Securing that stock Ford became president of the Ford Motor Company while Couzens became general manager.

The Ford company missed the pinching process in 1907 because Ford was quick to realize his new model was on the wrong road to motor popularity. His feature care of that year was Model K, a 6-cylinder automobile selling for $2,800.

Dealers were allowed a discount of 20 per cent, bringing the net price of the car down to $2,240, which was uncomfortably close to manufacturing costs. It took Ford and Couzens but a short time to remedy that mistake. They discontinued the heavy car, kept on with their lighter model, and a little more than a year later brought out the famous Model T.

Ford's deviation from his rule of a "low-price car" was the result of a desire to build more speed into his motor. In the years bounded by 1895 and 1910 there were many adverse conditions working against the industry.

Public opinion was prejudiced. Mechanical imperfections were numerous. High prices prevailed over a relatively low per capita income. There were inadequate service facilities. Bad roads were everywhere. Capital was unfriendly. The principal force working for the development of the industry was curiosity in this new form of transportation. Manufacturers intrigue that interest and curiosity by holding hundreds of track and road races. The public thought little of a car unless it could beat another car, and it is fair to assume that without these races the industry would have passed through a much longer experimental period before coming into public acceptance.

In 1907 there was no way for anyone to know

that public curiosity had thinned out and public interest had thickened. Ford, in control of his business, felt he had to do something to quicken sales so it was only natural he should turn to speed. As a race driver he gained his first real fame; attention had been attracted to him, just a few years before, when he had beaten Alexander Winton, president of the Winton Motor Car Co., of Cleveland, and track champion of the United States.

Winton. Winton. There's another name.

He sold the first gasoline automobile in the United States. For quite a few years thereafter he was the dominating influence in the automobile industry. He might have continued to be had he been associated, let us say, with such a man as Couzens proved to be with Ford. Winton had opportunity fairly in his hands. He dropped it. A genius at building internal combustion engines, a dreamer, skillful with tools but unskilled in maping the future, Winton saw his automobile business dwindle until bankruptcy closed its doors and nailed them shut.

Winton, on May 22, 1899, drove one of his machines from Cleveland to New York in forty-seven and one-half hours. His average running time was fifteen miles an hour. It was the first long-distance automobile trip in the history of the country and Winton's sales, hitherto con-

fined to engineers, broadened into sales to the public. Winton proved that an automobile, even in those days, could start from one point and arrive at another, hundreds of miles distant, within a certain specified time.

But, through the murkiness of defeat, the flame of Winton's mechanical genius kept burning.

Problems in transportation were, to him, personal problems. He shifted his thinking from land to sea. Into his organization came George Codrington, a practical business man, and between them they built the Winton Engine Works into one of the important marine engine building concerns of the world. They recorded that accomplishment within a few years.

It was not enough. Men's bodies grow old but, sometimes, the ambitions of men remain young. Winton, his imagination fired, turned to airplanes and at the age of 68, announced the completion of a light, American-made, Deisel airplane motor.

Three forms of transportation—land, sea and air; few men have done more for convenience and swift travel than this pioneer of Cleveland, Ohio.

Fame beckoned to David Buick—he sipped from the cup of greatness . . . and then spilled what it held.

Buick, in 1900, was manufacturing stationary engines for farm use. His business was known as the Buick Manufacturing Company and was located in Flint. He began experimenting with an automobile motor and became indebted to Benjamin Briscoe, then a producer of sheet-metal stampings.

Briscoe, having none too high a regard for Buick's business abilities but, at the same time, an intense interest in what the inventor was developing in the way of an internal combustion engine, added $1,500 to the $2,000 Buick already owed him that the experiments might be completed. In addition, Briscoe arranged with Buick to form the Buick Motor Company.

The incorporation called for the issuance of $100,000 in stock and of this amount Briscoe received, in pledge, $99,700. This was to protect his loan. The formal incorporation took place May 19, 1903. Briscoe was planning to take over the management of the Buick company in September, 1903, if Buick were not able to meet his obligations. He anticipated correctly but, in the meantime, became more interested in a motor designed by J. D. Maxwell. Disposing of his interest in the Buick company, he allied himself with Maxwell in the formation of the Maxwell-Briscoe Motor Co.

An arrangement was then made between

Buick and the Flint Wagon Works under which the latter company took over Buick's automobile business. On January 30, 1904, the Buick company was reincorporated with a capital stock of $75,000, half of which was listed as paid in cash. David Buick, for his share, received $15,000 in stock. Financial difficulties soon came. Banks were involved. Another reorganization was forced. The bankers, in a body, waited upon William Crapo Durant, who was the community's young man of accomplishment because of his success with the Durant-Dort Carriage Works.

"Will you manage this business?" they solicited.

"Yes," answered Durant. "But upon my own terms."

"What are they?"

"That I am not interfered with."

This agreement was quickly reached. In fact, it could scarcely be called an agreement. It was a concession on the part of Durant.

Durant, once in charge, increased the capitalization from $75,000 to $500,000 and, personally, procured $250,000 in stock subscriptions. The annual report of the Buick company, filed in 1905, does not indicate that Durant secured new money as cash capital. He did, however, secure something else quite as important:

He succeeded in obtaining new credit and extensions in time from old creditors.

In the summer of 1905 the Buick company had begun to produce and sell motor cars in quantities. At the close of the year it had manufactured, and disposed of, 673 cars and was making an interesting profit. So much so that on September 11, 1905, the company increased its authorized capital stock from $500,000 (all common stock) to $900,000 of common stock and $600,000 of seven per cent, cumulative, full-voting, redeemable, preferred stock.

In 1906 the company really got under way and, as compared with the preceding year's production of 673 cars, it manufactured, and sold, 2,295 automobiles.

Durant's magic wand was waving over it and over David Buick. But notes which Buick had signed against his stock had fallen due. They were unpaid. The stock was taken. Buick, off in a corner somewhere, didn't seem to care, and kept on puttering. He didn't know that millions had passed him by.

CHAPTER EIGHT

He Ruled His Little World and All the Ants In It

Established in indisputable command at Buick, Durant's ambitions began to be fired. He ruled his little world and all the ants in it. He delighted in obeisance of men. His arrogance was equal to his luck.

In later days, when he bestrode the world like a motor car colossus, it was his delight to demonstrate his vigor and vitality by laboring from seven o'clock one morning until one, two or three the next—and keeping a host of sleepy satellites attendant on his need. There is—or was—a touch of Gallic vainglory in this man and a sense of the dramatic which did not permit him to do things in the ordinary way.

He traveled with a retinue of retainers and took impish delight in seeing them bewildered while his quick brain steered its way through a maze of conflicting projects and appalling detail. Time and time again he would give an audience across his desk to one man while three, four, five or six, each with a separate proposition to present, anxiously awaited their turn in

various corners of the same room. He did not keep them waiting in an anteroom but grandiosely herded them all together in his office, if the whim seized him, knowing perfectly well there was heartburn, anxiety, and even jealousy in each conflicting breast.

They were big men, men of consequence, with deals to discuss running into millions and tens of millions, but they all stood about like awkward schoolboys awaiting his beck and nod.

If in the midst of these tremendous meetings his secretary came and in a low voice announced the presence without of some absolutely unimportant person for whom Durant had a special affection, the chances were ten to one that this master of men and millions would cry joyously:

"What! Old Bill! Show him right in."

With a winning, quizzical smile, Durant would turn to the disgruntled magnates standing about the room and say:

"Boys, will you excuse me for a moment? This is old Bill So-and-so who used to run a hotel in Such-and-such-a-place back in the days when I was selling buggies at a profit of a dollar apiece."

Old Bill would come in and Durant would slap him on the back and chuckle with glee—and, like as not, keep him "yarning" for half an hour while the important ones agonized.

I (MacManus) could never determine whether he indulged in those business grotesqueries through sheer mischievousness or because he was genuine kind and genial, but I think it was a bit of both. In the midst of tremendous operations, when he was manipulating millions in the creation of General Motors, he would perpetrate the pranks of a boy. It was impossible not to love him—and when the proper moment came he could be as searching, as stern, and as critical as the occasion required.

I have often thought that if I—whose imagination was almost as vivid as his own—had not felt it necessary to be more or less literal and direct in business, Durant might have perpetrated the atrocity of making me enormously rich. Happily that sordid fate was escaped. Our twin senses of mischievous humor always met but our conception of advertising never did. He could always recognize good work I had done for others but never so far abate his own dominant individuality as to admit that the same methods, applied to him, would prove successful.

One of several ludicrous incidents of our association occurs to me.

He telephoned one morning saying he would like to have me come to his office. I went, of course. Arriving, I found precisely such a scene as described—his office filled with men of im-

portance waiting their turn for five minutes. He left them all and came to me in an outer office—with a piece of pie in one hand and a glass of milk in the other.

Presuming, for a moment, to be familiar, I said:

"If you eat that pie and drink that milk without something to assimilate them you'll have indigestion. What you need is a good laugh. Here, read this."

I held out a piece of paper upon which I had, that morning, written a lampoon which has since traveled far and wide. He put down the pie and milk, read the verse and doubled over with delighted laughter.

Then: "Did you do this? Can I have a copy? Oh, you villain!"

This was the lampoon:

"I'm glad I'm not a vacuum
I'm glad I'm not a myth
I'm glad I'm not the sort of stuff
They fill pin cushions with.

But most of all I'm glad, O Lord
You did not make me Henry Ford."

The point of the joke is not in the unkind squib about Ford—who has enough troubles of his own. The joke was on Durant. After his

laughter had subsided he introduced me to a man whom I had never seen and of whom I had never heard.

"Theodore, this is Mr. So-and-So. We are organizing"—and went on to describe, in a rush of words, a collossal operation.

"This will require a series of letters which are very important. You talk it over with him and if you will be good enough please write the letters. Now, if you will excuse me, I must rush back to my office."

He rushed.

I looked at the man dazedly, and he looked at me—resentfully.

"Do you know what all this is about?" I asked.

"No, I don't."

"Well," I sighed, resignedly, "there's only one thing to do. You'll have to give me all the details and I'll advise you as best I can."

"But," he said, exasperatedly, "Mr. Durant and my people have not even come to a final agreement."

"Never mind," I returned, soothingly. "If Mr. Durant wants it you probably will."

I returned to my office, wrote the letters and took them to Durant. He made his usual corrective comments and said "they are all right" and then turned to the Man. In two moments it was apparent there was going to be no agree-

ment and no gigantic operation. The project actually ended then and there.

Durant went his way. The Man went his. I went mine . . . marveling at a mind which could juggle Gargantuan affairs in so casual a manner.

But, he was not so casual. He only seemed so. He simply had a terrific capacity of absorption and execution. As the rest of us can handle many small things with varying degrees of skill, so he could handle many big things in one day with consummate skill.

I shall never forget the Pie and the Milk and the Lampoon and the Man—and the Letters and the Many Million Dollar Company which came to naught.

It was, in explanation, the conception in Durant's mind of the General Motors Acceptance Corporation with its hundreds of millions of dollars' worth of business, every year. It was a development that occurred to him years before its realization by others.

John Ruskin has said that "genius is only the superior power of seeing." That Durant had such power there is little question. Combined with his inordinate ability to scan the horizons of the future his policy was to reach forth for everything that he might be prepared for prevailing winds of public opinion.

The automobile business was a hazardous business. Durant appreciated this. His azure dreams of power were often disturbed by nightmaric flashes. Fly-by-night concerns with no objective save a skimming of the market and immediate profits for their promoters were everywhere. Durant realized there had to be stabilization. Early in 1908 he proposed to Ford, Couzens, Briscoe, and Olds a consolidation of Ford, Maxwell-Briscoe, Reo, and Buick.

Ford and Couzens played with the idea, matched their wits against the wits of the others and when Durant appeared most hopefully they tossed in this stipulation:

"We will go in only on condition we receive three million dollars, in cash."

Not to be outdone by the Ford and Couzens ultimatum, R. E. Olds got to his feet and pronounced sentence on the consolidation:

"If you do that for Ford you've got to do likewise by Reo. We will expect three millions, in cash, also."

Durant waved his hands. The meeting ended. The project was abandoned.

Durant, however, was not easily discouraged. Calling aside Benjamin Briscoe, he said:

"Let's go it alone. We two."

Briscoe was willing and the two men went to see George W. Perkins, of J. P. Morgan & Co.

The bankers agreed to underwrite $500,000 of the new $1,500,000 capital required. A charter was tentatively drawn up and the consolidation was to be called the International Motors Company. Perkins turned over the details to Francis L. Stetson, one of the Morgan attorneys.

Stetson, meticulously minded and legally trained, could not find it within himself to have confidence in Durant. The casualness of the man was irritating.

In the stiffly-cold, book-lined confines of his own office the lawyer was omnipotent. Even his desk gave the impression of hardness, legality, austerity, aloofness. Behind the desk the lawyer, watching Durant through hostile eyes, asked:

"Of course, Mr. Durant, we will have to have the prior approval of the Buick stockholders before we can proceed with the details."

"There need be no concern over them," calmly assured Durant.

"Have you made any announcements to your stockholders of what you are planning to do?"

"No general announcement. Some of them know what is going on."

"Don't you think you had better tell all of them?"

"That is unnecessary in the present stages of the negotiations."

" 'Unnecessary!' " exclaimed the lawyer.

"Whenever I present the proposals there will be a ratification of them," went on Durant.

Stetson then objected to transferring Buick stock during the course of the proceedings and declared any sellers should be given opportunities for repurchasing their stock in view of the new alignment.

"Why?" mildly interrogated Durant. Stetson did not answer. Durant then added:

"My attorney, John C. Carton, of Flint, is an honorable man. He is advising me in this matter."

"We are honorable, too."

"I don't doubt it but I'll continue to follow Mr. Carton's advice," smiled Durant.

"Very well, sir. That being true, I shall advise Morgan and Company to drop all negotiations."

The interview was ended. Morgan accepted Stetson's recommendations. Later on it will be shown how that decision cost the banking house more than $200,000,000.

Durant tried to influence Briscoe into going through with the negotiations without the Morgans but met with a refusal. Briscoe was under obligations to the bankers and he did not consider it expedient to incur their displeasure. Undismayed, Durant kept his mind busy. Ru-

mors began to filter in that Briscoe was planning a consolidation of his own. Then, one day, Durant received a call. Briscoe was hesitant. Ill at ease. Finally he blurted:

"I've just been talking with Perkins and he asked me if I would see you and suggest you do not use the name 'International Motors Company' over any group you are planning to bring together."

"Why?"

"He feels because he suggested that name that he should have the right of use."

"I see. Well, tell Mr. Perkins not to worry," answered Durant. He reached for a pencil, crossed out the word "International" from some stationary on his desk and wrote in—

"General."

"How does that look?" he asked, holding it so Briscoe could see.

"Fine. You mean you'll call your organization the 'General Motors Company'?"

"Yes."

Briscoe left. Durant sat there, studying the sheet of paper on which he had written—almost carelessly had written—a name that has come to be familiar around the world. He continued to measure, in his own mind, the automobile industry. He speculated upon Briscoe. Aside from Ford and, perhaps, Reo, the most attrac-

tive property was Cadillac. Durant, in the adroitness of his own thinking, appreciated the strategic advantages of its acquirement.

He touched a button and set in motion an investigation. Word was brought back to him:

"Benjamin Briscoe has an option of purchase on sixty per cent of the Cadillac stock at one hundred and fifty dollars a share."

Durant tapped other sources of information. There was a confirmation of what he already knew. Additional news came to him. He smiled. Stood aside. Waited.

Briscoe, busy with his plans, allowed the Cadillac option to expire. Durant pounced on it. Offered $160 a share for a tentative option and swung the deal. He did not obtain formal possession until July 1, 1909, and at that time paid $300 a share, or $4,400,000 in cash and $275,000 par value of General Motors preferred stock.

On November 12, 1908, Durant gained control of Oldsmobile for $17,279 in cash and a transfer of $1,827,694 in General Motors preferred stock and $1,195,880 in common stock. For Oakland, the other original unit along with Buick in the General Motors Company, he paid $305,523 in cash. He bought others such as Elmore, Cartercar, Randolph, Reliance—more than 20 different companies came under his con-

trol within the two years from 1908 until 1910.

Swift and breath-taking were his moves. While associates stood about, dumbfounded and frightened, he, in his casual way, explained:

"Cartercar has a friction drive—maybe that will be the thing the public wants. Elmore has a two-cycle engine—maybe that's the answer to motor car popularity. How can I tell what the engineers will do next? I want a lot of different makes so I will be sure, always, to have what people want. I am playing safe—all along the line."

The companies Durant acquired, or bought into, during those fugitive, turbulent years were:

Cadillac, Olds, Oakland, Marquette, Cartercar, Elmore, Randolph Motor Truck Co., Rapid Motor Vehicle Co., Reliance Motor Truck Co., W. T. Stewart Body plant, Weston-Mott Co., Northway Motor & Manufacturing Co., Michigan Motor Castings Co., Ewing Automobile Co., Welch Motor Car Co., Dow Rim Co., Michigan Auto Parts Co., Jackson-Church-Wilcox Co., Novelty Incandescent Lamp Co., Heany Lamp Co., Champion Ignition Co., McLaughlin Motor Car Co., Oak Park Power Co., Brown-Lipe-Chapin Co.

Glance back over that list and in an inconspicuous place will be seen the Heany Lamp Company. With all his wizardry of finance, with

all his knowledge of men, with all his intuition as to what the future held—William Crapo Durant missed on that one. Missed badly and the cost was terrific. Strangely enough, everyone told him the facts; apparently, he flaunted them.

John Albert Heany, in 1907, was granted a patent on an improved electric light bulb. Soon afterwards suit was brought against him by the General Electric Company. In the fall of that same year Heany, his attorney, H. E. Everding, and a patent office clerk, Ned W. Barton, were charged with altering the original application so as to permit later ones to be classified as revisions.

Everding and Barton were found guilty in Federal court and were sentenced to prison; Heany was acquitted. In the meantime, Heany had organized the Heany Lamp Company, the Heany Company, and the Heany Electric Company as well as the Tipless Lamp Company and had assigned his patent rights, such as they were, to these organizations.

Durant, squarely in the face of the litigation, acquired, for General Motors Company, on January 4, 1910, the different companies Heany had organized. For these companies Durant paid $1,111,000 of General Motors preferred stock, $5,908,500 of its common stock, and $112,759 in cash.

In return, he got—nothing!

The United States Commissioner of Patents voided the Heany rights and not long afterwards General Motors' "holdings" in the Heany companies were written off the books.

Appraised at present-day valuations, the securities issued for the Heany "properties" are worth more than $325,000,000 and cash dividends, since 1910, in excess of $50,000,000.

Durant, after that transaction, lost control of General Motors. The bankers stepped in, took charge of operations, and continued in charge for five years . . . when Durant came back!

And, in coming back, Durant furnishes another of the amazing stories in this romance of men, money and motors.

CHAPTER NINE

Some "Might-of-beens"

Detroit, in those years, was a promoters' paradise—

The Majestic Building, a 14-story structure, was the architectural boast of the community and state. Horses and buggies, bicycles, automobiles, and pedestrians flowed in tangled currents. Electric lights, on tall, spindling towers, relieved the night. Washington Boulevard, now a fashionable shopping district, was a street of rookeries where questionable practitioners held forth.

There was one promoter who started a company. The machine he had designed was an improvement, in some ways, from automobiles that were running the streets. He talked with friends. They became enthusiastic. He went to an attorney and incorporated a company.

He sold stock—a million dollars' worth. He built a plant. He sold more stock. He built a machine. He sold more stock. Then—he got out.

He had *his* million!

The company that had been built about his name dawdled for a few months and expired. He, too, passed along shortly thereafter. For a time threats of suits were made against his estate. They also died because there were those who expressed an unwillingness to strip an innocent widow of the luxury to which they thought her entitled after years of hardship.

The incongruity of it was—

The automobile he had was pretty good, as automobiles were judged at the time. He did have good chances for great success. But the avaricious thinking that had started him off controlled him and forced him to get out when he had accumulated an amount which, to him, was wealth. In all probability he could have made far more and, in the making, would have worried far less.

There was Sherman L. Depew, a nephew to Chauncey M. Depew.

Not long before he died Chauncey M. Depew told one of the writers this little story:

"Twenty-odd years ago my nephew wrote to me and said he had an opportunity to 'invest five thousand dollars in the Ford Motor Company. I think there is something to this automobile business. That is, if a man can guess right he will make himself rich, in no time.'

"I answered his letter. Told him:

" 'Nothing has come along to beat the horse. Keep your money. Or, if you must spend it, buy a horse and you'll have enough left over to furnish it with feed the rest of its life.'

"My nephew took my advice. He twitted me, a good many times afterwards, about keeping him from becoming a millionaire."

A chance street meeting took millions from another.

John Porter (that wasn't his name but it will serve) was walking down Cass Avenue, in Detroit, early one afternoon. His thoughts were on his investments and a trip he was planning. As he hurried along, head down, eyes following the pavement and thinking hard, he heard a voice and felt a friendly slap across his shoulders.

"Hello, John."

Looking up Porter grinned. "I was just thinking about you."

"Well, you know the old line—'speak of the devil.' "

"I'd hardly call you that. Seriously, though, how are things coming at the factory?"

"Better."

"That's good. Maybe I can get a better price for my stock."

"What do you mean?"

"That's what I was going to explain. I'm taking my wife and daughter on a leisurely

motor trip to New York. I will be out of touch with the market for three or four days. I have decided, in view of the unsettled conditions at the plant, to sell out, pocket my loss and forget it."

"You're fooling."

"No, I'm not. I'm on my way to my broker's office now."

The president of the automobile company pleaded. Porter was obdurate. The president put the matter on a personal basis. Porter was unmoved. Finally, the president proposed:

"All right, John. I was instrumental in getting you into this deal but I will not be the instrument that prevents you from getting out. I am going to ask you to do me one favor. Don't sell the stock today."

"Why?"

"There is going to be a board meeting Monday—"

"Yes, I know," interrupted Porter.

"That is three days distant," continued the president. "You are leaving tomorrow. How long will you be gone?"

"Two weeks."

"Nothing can happen to the stock in that time. That is, nothing drastic. In fact, if I am permitted to have my way at the board meeting Monday our position will improve. What

I am proposing is this: Let me have a proxy on your stock until you get back. With it in my possession I can dominate Monday's meeting and the directors will be compelled to adopt my policies."

Porter grew thoughtful. They walked on together for another block, or so, before he answered:

"All right. Come up to the office and I'll give it to you. But, remember, I'm selling out as soon as I get back."

"Very well, John. I'll not try to stop you. And, thanks for your kindness."

On Thursday morning, of the following week, Porter and his family arrived in New York. They had been out of touch with newspapers during their trip. Picking up a morning edition, Porter turned to the financial pages and he saw an item pertaining to the bankruptcy proceedings against the company in which he was interested. His friend, the president, had overestimated his strength, even with Porter's proxy in his possession.

Porter in purchasing the stock had used, as collateral, $50,000 worth of stock which he had bought, outright, in another automobile company. The creditors, as he learned by wire, had jumped this collateral the first thing.

Had he refrained from his second automobile

venture, his $50,000 in stock would have been worth, today, $15,000,000. In dividends, across the intervening years, he would have collected an additional million dollars.

Benjamin Briscoe was another who saw the vision and who followed it, hands outstretched, eyes uplifted. Day after day, night after night he had sat enthralled by the prismatic colors of the approaching dawn as word-painted by that artist of ideas, hopes, and plans—Durant.

Briscoe came into the automobile industry from a sheet-metal business he had organized in Detroit. He prospered but encountered difficulties in 1901 when the City Savings Bank went into the hands of a receiver. Briscoe's funds were in that institution and he was compelled, after a time, to go to J. Pierpont Morgan & Co., in New York, for a loan. He got it in the form of a check for $100,000; in return, Morgan received practically a half interest in the Briscoe Manufacturing Company.

In 1902 Briscoe began manufacturing parts for the Olds Motor Works and in that association became acquainted with J. D. Maxwell. About the same time David Buick interested Briscoe in an automobile he was building. Briscoe, as has been told previously, gave Buick financial support but later stepped aside to go

with Maxwell who was also experimenting with the new method of transportation.

He organized the Maxwell-Briscoe Co. and personally sold stock, first in Detroit and then in New York. In 1904 the new company had $42,000 in cash and began operations. In 1905 a New York investor put $100,000 into the business and in the next five years the company grew into a $3,000,000 corporation. In 1908, like many other similar concerns, it encountered financial squalls and it was then that Briscoe began his series of serious discussions with Durant.

Durant proposed an alliance of the Maxwell-Briscoe properties with Buick and was agreeable to a $5,000,000 stock transfer in what became General Motors for the Maxwell-Briscoe interests.

This was the proposition J. Pierpont Morgan & Co. declined. The banking house had a substantial interest in Briscoe and it thought more of him than it did of Durant. In fact, Stetson's report had antagonized it against Durant. It thought little of him and less of his properties.

What Durant offered is now worth $200,000,000. In dividends, since then, the stock has paid somewhere in the neighborhood of $35,000,000.

Proving that the Morgans, with all their

astuteness and their planning in futures, could not look ahead and agree, with assurrance, on what was destined to happen in such an effervescent industry.

Briscoe, following the failure to organize, with Durant, the International Motors Company, tightened his belt, loosened his collar, arranged his boutonnière and set out, with adjectival sword and verbal spear, to storm the ramparts of public opinion. He approached the Morgans with another plan.

"I have an option on the Cadillac business," he told George W. Perkins. "I have also talked with Ford and Couzens, of the Ford Motor Company."

"You mean you have talked with them since you were with Durant and Olds in that meeting?"

"Yes, sir."

Perkins wasn't greatly interested in the Ford situation. He was, however, concerned over Cadillac. He sent a confidential investigator to Detroit. This emissary looked into Cadillac's plant equipment, its finances and its possibilities. He made a favorable report. It was so long in coming, however, that Briscoe allowed his option to expire, little suspecting Durant was watching.

Finally, upon receiving favorable assurances

from Perkins, he returned to Detroit, went to the Cadillac plant and was informed:

"Durant now has the option. He waited for your agreement to expire and then talked Henry M. Leland into accepting a tentative price of one hundred and sixty dollars a share for the stock."

"I'll meet that price," cried Briscoe, after a hasty mental calculation.

"It's too late."

"I'll talk with Leland."

"Go ahead."

It did him no good. Durant had seen to that.

In desperation he went back east. Heard he might be able to buy the Columbia Motor Car Co., of Hartford, Connecticut. He knew there was wealth back of Columbia and while the property was not precisely what he wanted he did have two ears that could enjoy the jingle of dollars. Thus did he become acquainted with the Bradys, the Wideners, and the Elkins group in New York City. He talked with them. They agreed to put in $1,000,000 in fresh capital in their Columbia project and also to give the company a new start with practically no debts.

Briscoe was elated. He accepted. Confided to his new-found financial friends that, in 1908, two years before, he had quietly incorporated the United States Motor Company in

New Jersey. He dusted off his legal proofs, listened to suggestions and increased the authorized capitalization to $30,000,000, divided equally between preferred and common stock.

This September day, in 1910, was probably the biggest day in Benjamin Briscoe's life. Big days come to all—great and small. On that day Briscoe was big—BIGGER THAN DURANT. That's what was said, anyway. For Durant's General Motors Company was capitalized at but $10,000,000!

From the summit of his achievement Briscoe again looked towards Detroit. He told Anthony N. Brady of various interviews—of Durant's ideas, hopes, and plans—of the chance that still remained, as he thought, of getting Ford and Couzens to sell.

Brady, unlike Perkins, was aroused. Issued instructions. Briscoe, because of past experiences, preferred not to appear in the negotiations. He sent a friend named George F. McCullough to Detroit. McCullough saw Ford and Couzens. Offered them $8,000,000 for the Ford Motor Company and received this enigmatic answer:

"Let's see the color of your money."

McCullough wired to Briscoe and the latter hurried to see Brady. The time was not propitious. There had been a crash in the stock market

and Brady was disinclined towards immediate action. Ford and Couzens, back in Detroit, were chuckling. But, of course, Briscoe didn't know that. Having just escaped selling out to Durant two years before, they were breathing easier and were trifling with proposals of purchase.

Briscoe then took over the Sampson Truck Co., and followed by acquiring the Stoddard-Dayton Company. In completing this purchase he failed to look into the actual condition of the company. He did not know, until too late, that Stoddard-Dayton had contracted for millions of dollars' worth of supplies for the coming year. From this cause United States Motor was soon in serious shape.

Immersed in the tangle of his own making, Briscoe received a call from Anthony Brady. He responded and with no little trepidation waited for Mr. Brady to speak.

"Here are some statements," finally said the financier. "I wish you would look them over and give me a report on them tomorrow afternoon."

Brady handed him a rolled bundle and bowed him out.

Curious as to what they were, Briscoe examined them at the earliest moment and discovered they were statements covering various

General Motors companies. The next day he made a favorable report whereupon Lee, Higginson & Co., of Boston, the Central Trust Co., of New York, and others in that group loaned $12,000,000 and averted a disaster in General Motors.

A few days later Briscoe read in the newspapers that Durant had been relieved of his responsibilities in the management. Insecure in his own saddle, Briscoe was sorry for his old friend.

Anthony N. Brady, no matter what his thoughts or purposes regarding Durant and General Motors, was not unmindful of conditions within United States Motor. Briscoe's operations were refinanced by the issuing of $6,000,000 of debenture bonds which, accompanied by a common stock bonus, were sold to Eugene Meyer & Co.

The relief was little more than temporary. Twenty-eight different models of automobiles, produced under seven or eight names, failed to catch public fancy and in 1912 a receivership was appointed. In the hearings that followed more than 150 different corporations were found to be under the Briscoe banner. Most of these were liquidated; many of the plants were sold and all the automobile products were discontinued.

Briscoe was through.

CHAPTER TEN

The Tragedy of Victory—and Defeat

Benjamin Briscoe was a success in a small business but managing a $30,000,000 corporation was quite a different proposition. He had Durant's dreams—surely, he had listened to them often enough—and he believed them.

Several years ago, in an article printed in a Detroit weekly newspaper, he recalled that first meeting with Morgan when he received $100,000 for an interest in his business. He said the size of the check unnerved him—that, rather than carry it back to Detroit, he deposited it in the New York Clearing House.

Perhaps, in that confession, he laid bare one of the reasons for his failure to manage United States Motor. The company was big. Much money was involved. Much prestige was at stake. Because he was in a big position his mistakes were likewise big. They probably frightened him. They pulled him down.

Durant erred. Often. And Durant's mistakes cost many, many millions. But Durant

also picked winners and the profits he made from those winners swept out his losses.

Briscoe had no winners and his losses engulfed him. They threatened, for a time, to also engulf those who backed him.

Durant went down—but rose again. Briscoe drifted back into that obscurity from which he had been catapulted.

The Duke of Wellington once expressed it this way:

"Nothing is more tragical than a victory except a defeat."

While Durant and Briscoe were still occupying the thoughts of those who were fascinated by this swiftly changing business, a young engineer was dividing his time between his laboratory in Dayton, Ohio, and the manufacturing plants in Detroit. He was trying to sell an idea he had developed into visible form.

His name was Charles F. Kettering and he is now vice president of General Motors as well as being General Director of the General Motors Research Laboratories. Kettering, then, as now, was a tall, angular man whose body seemed, at times, to be all knees and elbows. In his eyes burned an intenseness that has only been heightened by the passing of years. A high-pitched voice, a staggering knowledge of things and events, and a remarkable ability to explain the

processes in simple, graceful, graphic language, Kettering, today, is recognized as one of the foremost scientists in the world.

Kettering's chief assistant is F. O. Clements who, when the farmer boy was a student in Ohio State University, was Kettering's laboratory instructor.

Dr. Clements recalls those days:

"I knew I had a remarkable mind in my class. At the time I often said: 'Kettering will be a tremendous success or a gigantic failure. He will never stop half way.' "

"Why did you say that?" he was asked.

"Because, as a student, he never took anything for granted. A copybook stating something as a fact meant nothing to him. 'How do I know that's true?' he often challenged. The fact that satisfactory experiments might require days of intense effort meant nothing, either. Kettering would go to work and would satisfy himself.

"When it was written that 'something could not be done' he took it as a personal challenge. 'How can anyone say that such-and-such-a-thing is an impossibility? Perhaps that fellow didn't try often enough.'

"After he had developed his electrical ignition system and electric self-starter for automobiles, engineers tossed the inventions back into his lap, saying:

" 'These things may be all right but they're causing the motor to knock so we won't be able to use them.'

"Did Kettering accept their judgment? Not much. He expressed an opinion that the gasoline was really causing the knock. They laughed at him. He wiped the laugh from their faces although it took him twelve years and required probably one hundred thousand experiments. He proved the knock was in the fuel."

Which brings us into the story of the electric self-starter and the electrical ignition system. Without them the automobile could scarcely have attained real popularity.

In 1910 Kettering was sitting in the Cadillac plant, in Detroit, explaining his idea for a self-starter to Henry M. Leland. Mr. Leland after listening began telling of the death of a dear friend.

"He was driving across Belle Isle bridge, here in Detroit, and he saw a woman trying to crank a stalled car. Stopping his own machine he got out, went over, and asked if he could help.

"The woman thanked him and explained she did not have sufficient strength to spin the motor. He grasped the crank handle. Tried to spin it. The engine kicked back and the handle struck him in the jaw. Unthinkingly, the strange

woman had not retarded the spark. My friend died—from the injuries."

Mr. Leland got up from his chair, walked over, and stood looking out of a window. His lips were trembling. His eyes were moist. Kettering, staring at the floor, was silent. Finally the manufacturer turned back.

"You know, I loved that man. I am glad that you are going to work on something that will do away with hand cranking."

Kettering returned to Dayton and through the hours on the train he thought of little else. A self-starter for an automobile. All through the next day it was in his mind. And the next day—and the next . . . until days crept into weeks and weeks grew into months. A year later he brought what he had built to Detroit and demonstrated it to Cadillac engineers. They were skeptical.

"It won't work," they declared, as he concluded his theoretical explanation.

"How do you know?" he challenged.

"Because it takes from two to five horsepower to crank an automobile."

"Does it?"

"Don't you know that it does?"

"No."

"Well, it does," they affirmed. Then asked:

"How does this device work?"

"It operates off the storage battery."

This must have sounded ridiculous to them, for they laughed. "Don't you know that no small storage battery can furnish enough power to crank an automobile?"

"No."

"Well, the campanies making the batteries will agree on that."

Kettering was unimpressed. "How do you know this starter won't work until you try it?" he asked.

That sounded reasonable as a suggestion so they made the test.

The self-starter worked!

The reason it worked was because Kettering had spent months and months experimenting and perfecting its details. He had substituted theory for practice and he knew his product would respond to all necessary demands placed upon it. A year before electrical engineers, out of theory, had told him no small storage battery could furnish enough power to crank an automobile so the arguments the automobile engineers advanced were theories he had already eliminated.

Once his experimental car slid into a ditch, breaking his leg. That same night the garage which contained the Cadillac test car on which

had been installed the only other self-starter in existence, was destroyed by fire.

If all the progress that had been made towards getting the self-starter on an automobile were not to be lost then someone had to put it in working order, so performance tests at Cadillac could be continued. No other person was familiar enough with the mechanism so Kettering, two days after his accident, with his broken leg in a heavy cast, traveled 200 miles on a train—from Dayton to Detroit—and then worked on his back, underneath a car, until he had his starter again in operation.

After having it installed as standard equipment—the Cadillac was the first car to have electrical ignition and an electric self-starter—engineers found fault saying it was responsible for what they called "a spark knock." Kettering, as told by Dr. Clements, was of a different opinion. He observed that "new things are always blamed when other things go wrong" and set about to prove his own conviction that the "knock" was in the fuel—and nowhere else.

He worked for years, journeyed to the far frontiers of the elements, and came back with Ethyl gasoline.

He had captured the knock.

Kettering was also responsible, in a large way, for the development of lacquer finishes on auto-

mobiles. Years ago he, like everyone else in the industry, realized that mass production methods could never be really efficient until the time spent by cars in paint shops was greatly reduced.

He was also impressed with the idea that the finish was no good, despite what the sales and advertising departments said about it. Regardless of claims of the paint manufacturers who insisted:

"It is the best finish in the world."

"They don't mean that," thought Kettering. "What they mean is: 'it is the best finish they know anything about.' "

He called a meeting of paint experts. Told them his problem. "It is taking too long to dry and the finish isn't any good," he declared, and explained that thirty-seven days were required for the finishing of a Cadillac automobile.

"We think we can help a little," they promised.

Then went out for lunch.

When they came back they said: "We can reduce that time to thirty-four days."

"I think we ought to reduce it to very much less time than that."

"How much time do you think it should take?"

"About an hour."

For a full minute there was silence, then all clamored together:

"You can't finish an automobile in an hour."

"For what reason?"

"Because the paint won't dry."

"Can't you do something to make it dry faster?"

This time they had him in a corner.

"We have exhausted everything that is known about dryers and you can't finish an automobile in an hour, or two hours, or a day because Nature, when She made the materials going into paint, fixed the length of time for drying."

Kettering was in New York a little while afterwards and saw some pin trays in a Fifth Avenue window. He inquired about the finish and learned it was a lacquer that came from New Jersey. He tried to make arrangements to get a quart but found he couldn't because that much had never been made at one time.

"What do you want to do with it?" he was asked.

"I want to finish an automobile door."

"You'll never finish an automobile door with that."

"Why not?"

"It dries too damn fast."

There he had two extremes. With some good cooperative work between the du Pont Company and General Motors research laboratories, the painting time was reduced to where it is now possible to give several coats within an hour.

That, briefly, is the story of Duco.

CHAPTER ELEVEN

On the End of a Rope—Pulling in

RESEARCH, in the early days of the automobile, was neglected. Not thought of. Or, if it was thought of it was not practiced. Patient money is needed in research and the money these men were making was highly impatient. The business was so uncertain that the practice of "taking out as much as possible and putting back as little as possible" was the rule.

There you have one of the principal reasons for the sheet-iron buildings which dotted Detroit and which cradled the industry. Plant investment was kept down, liquid cash was kept up, and they were always ready to jump.

How highly improbable, then, for them even to consider the endless expenditures encountered in research.

Henry Ford once expressed it this way:

"The automobile business was fortunate. It seemed so unlikely to the wise financial men of a quarter of a century ago that it had to begin at the beginning—suppose large sums of money had been sunk in the early models built and great

factories built to produce those models it would have been awful to think of what would have been the status of the industry today. Progress would have been impossible.

"But the successful motor makers began in little shops, with few helpers, and they learned. Then equipment was small enough so they could adapt themselves to the requirements of progress. They were able to grow."

Ford, in retrospect, is sound in his philosophy, but Ford, in passing through that formative period, was quite similar to the others. None could foresee what was on the end of the rope they were all pulling in; and what would come to those who were strong enough to keep pulling.

Ford's experimental laboratories are huge today; so are the laboratories of General Motors, Chrysler, Packard, and the others. Millions of dollars are spent every year in correcting imperfections; millions more are used in trailing new ideas.

The attitude of the companies has changed. After the decision affecting Selden, manufacturers got together for a pooling of patents and approximately 100 producers signed a cross-licensing agreement under which patents owned by any party to the agreement were extended to others within the association without payment of

royalties. Naturally, exceptions in patent rights were made but this agreement has reduced patent litigation within the industry to a minimum—and has helped everyone.

Automobile engineers are now exchanging help. Frequently they conduct experiments within the walls of competitive institutions. Co-operation is the habit rather than the exception.

It was during this period of flux that Alfred P. Sloan, Jr., who in after years was to become president of General Motors, first met Ford.

"As the industry was just starting I was in the manufacturing business in the East," said Sloan. "We had a product, the Hyatt roller bearing, which was applicable to the motor car and we had supplied some of our product to many experimental vehicles. It is hard to appreciate it now, but at that time anyone experimenting with the motor car was looked upon almost in the same category as if they were trying to discover perpetual motion. Finally, out of those experimental efforts, came the motor car.

"Our first job was to prove to the public that the cars would run. The automotive shows came into the picture and in the earlier shows in the old Madison Square Garden there was a track and the cars were operated around the track under their own power; the public looking on. The company I was with at that time had a small ex-

hibit up in the balcony and all day long people came along who were thinking of going into the industry.

"Among them was Mr. Ford and I not only made his acquaintance at that time but succeeded in interesting him in our product. As a result of this Mr. Ford became our best customer. As a matter of fact, my start in life was greatly helped by the support that Mr. Ford gave our little business at that time."

Sloan is one of the few men who have risen to prominence in the industry, who did not receive his early manufacturing training in, or near, Detroit. John Wilkinson didn't nor, of course, did Colonel Charles Clifton. Clifton, as president of the Pierce-Arrow company, was in the business of manufacturing bicycles before the advent of the automobile. After the introduction of the motor car it was natural his company should remain in Buffalo where it had been located for so many years.

John Wilkinson, an engineer, was experimenting with an air-cooled motor some thirty years ago in a small shop in Syracuse. H. H. Franklin, owner of a die-casting business in Syracuse, heard of Wilkinson's experiments, became interested, and went to see the engineer. The two men were immediately attracted by each other

and Franklin, a business man, took care of the financing and of the building of the car.

After they had begun to prosper a little, Franklin received a bid from the Buffalo Chamber of Commerce to move the plant. He listened to proposals, could not reach an agreement and finally discontinued them, remaining in Syracuse.

To the public one of the mysteries of the industry has been the absence of successful air-cooled motor cars other than Franklin. The facts are: Various companies have tried to perfect the idea and have failed.

One of the largest organizations, a few years ago, had its plans practically completed for the announcing of an air-cooled car in the low-price field. Years had been spent in development work and millions of dollars in experiments—time and money were written off, at almost the last minute.

But, that is getting ahead of the story.

A little while ago we were telling about Benjamin Briscoe and the United States Motor Company. The man who was to succeed Briscoe was one who got manufacturing experience in automobiles in the Ford Motor Company. Walter E. Flanders was his name.

A builder of crankshafts, Flanders went to the Ford plant in search of an order. Ford asked

questions. Became interested. Learned that Flanders' plant was a small one and that his working force corresponded.

"Can you fill a quantity order for crankshafts?" inquired Ford, somewhat amused at the self-confidence of his visitor.

"Yes."

"How will you do it?"

"Because I have a crew of men who will take off their shirts for me."

Not many minutes afterwards Flanders left with an order for 1,000 of the accessories. There was a clause in the contract that he had to begin deliveries within a certain time and maintain a specified schedule. Money was scarce but Flanders had built up a reputation, in a small way, with machine tool manufacturers. They were willing to extend credit. He got down to work and kept his promises.

Ford, however, was having troubles of his own. He wanted to get into big production and his manufacturing facilities were dragging. In his dilemma he thought of Flanders, sent for him, and offered him the job of production manager. He offered a salary and a bonus of quite a few thousands of dollars if Flanders would undertake the job of restoring order and producing 10,000 cars the next year. Flanders wasted

little time in accepting and little more in starting to work.

He sent for Thomas S. Walburn, his chief assistant in the crankshaft business. Between them they hired and fired, set up new machines and tore down old ones, hammered and fought and cajoled until they began stepping up production. The third month Flanders turned out 1,000 cars. In the last three months of the year it was almost entirely a question of getting materials. Flanders kept after suppliers, worked them overtime, and stacked their shipments in vacant buildings for blocks surrounding the Ford plant.

Two days before the expiration of the year the 10,000th car rode off the end of the production line.

Flanders received his bonus and soon after the first of the next year he resigned to join with Barney F. Everitt and William E. Metzger in forming the E-M-F Company.

Three types—Everitt, Metzger, and Flanders. Everett, short, fat, jovial but a planner; Metzger, tall, keen-eyed, persuasive, and a salesman; Flanders, bluff, pugnacious, two-fisted, and a bellowing voice that could hammer through the clatter and din of a shop. Everitt and Metzger had money and sales experience; Flanders had manufacturing ability—what more did they

need? And here, in a few words, is how they worked it out:

Flanders tooled the factory with but one thought in mind—quantity production. As at the Ford plant, he installed Walburn as his first assistant and once in readiness they brought out the E-M-F 30. It was an instant success. So much so that the Studebaker Corporation, then making wagons and wanting to get into automobiles, invested in the company and assumed sales responsibilities for the car.

With their distribution problem answered, Everitt confined himself to financial affairs while Metzger went on a trip to Europe. Flanders kept on working.

Late in 1909 the Studebakers shook the placidness of the triumvirate by announcing a refusal to accept further deliveries on cars. Frantically worded cablegrams were shot off to Metzger. He came rushing back. Flanders, however, did not wait. Calling in the sales and advertising executives, he outlined his plans and immediately arresting advertisements were sent to newspapers all over the country announcing the E-M-F line was open to dealers.

There was an immediate response. Every train coming into Detroit carried its load of agents seeking franchises. The Studebaker Corporation sought to outgeneral Flanders by tak-

ing the matter into the courts. It failed here, too. Flanders was ready and won easily.

There remained but one move left for Studebaker if it wanted to market the E-M-F product. It held off from making it for quite a little while but on February 14, 1911, it capitulated.

It bought the business.

During its two and one-half years the E-M-F company had manufactured 23,432 automobiles. Its net sales totaled $21,236,415, and its net profits had accumulated into $3,214,082.

Everitt, Metzger, and Flanders did pretty well on that deal.

Everitt and Metzger then started the Everitt Motor Car Company while Flanders, after remaining with the Studebakers for a few months, resigned and organized a small concern known as the Flanders Motor Company, manufacturing electric cars and motorcycles.

Everitt and Metzger finally induced Flanders to again join with them and they merged the two organizations into the Flanders Motor Company. Too late, Flanders learned that the financial affairs of the Everitt company were none too robust and it was while he was trying to restore order than an offer came to succeed Briscoe.

Flanders was hesitant. The negotiators became insistent. Still Flanders held off.

"Just what do you want?" they finally asked impatiently.

"The salary you offer is interesting," answered Flanders. "Your expressed confidence in me is flattering. But what am I to do with the business I already have?"

They conferred. They told him:

"We will take your business into the new company. We will offer you stock in exchange."

That was what Flanders had wanted. He signed a contract to manage the Maxwell Motor Company—the successor to United States Motor Company—and the length of the term was for five years dating from January 1, 1913.

In putting his signature to that paper he put his old partners and cronies, Barney F. Everitt and William E. Metzger, into a way of getting back far more than they had lost in their venturings with the Everitt Motor Car Company.

CHAPTER TWELVE

Nash, Erskine, Jordan and Others

While William E. Metzger, one salesman, was dreaming of wealth and ocean voyages, another salesman, John N. Willys, was trying to vision what was to come in this industry into which circumstances had pitchforked him.

Willys, in 1908, had lifted the Overland company from the depths of bankruptcy to a pinnacle of respect. His plant equipment in Indianapolis consisted of some machinery, a sheet-iron shed, and a row of tents. Still in his thirties, he had a boyish enthusiasm to go back to Elmira, New York—and take his business with him.

Back to Elmira where, not so many years before, he had pulled down his coat to hide the patches in the seat of his pants. Back to Elmira—as he was now. That would be the fulfillment of his hopes. Every day he thought of it—often talked of it. Now he was preparing to do it. Just a day or two before he was to leave Indianapolis he received a telephone call from Toledo.

"The Pope-Hartford plant is for sale—at a bargain," said a voice.

A few hours later Willys was on a train for Toledo. He looked over the plant, asked innumerable questions, got a price, and returned to Indianapolis. Summoning his board of directors, he said to them:

"I have rigged up a deal for the Pope-Toledo plant in Toledo."

The directors were timid.

"What will it cost?" they inquired.

Willys named the price—$285,000.

That made them even more timid.

"We've got some money in the bank. We've cleaned up our accounts. I know we will make a million dollars the day we buy this plant," Willys persuaded.

They listened. As Willys continued to explain they lost their timidity, became confident, and gave him the authorization he needed. Willys bought the plant. Within the next month he had sold off much of the steel and parts with which the building was stocked—material he didn't need—at a price that almost paid for the building. At the end of the year the Overland company had $600,000, in cash, in the banks. It had moved to Toledo and was rapidly growing in importance.

Along about this same time—or, to be some-

what exact, in 1907—another company was organized of which little is now known but out of which much might have developed.

In that year Henry Ford, James Couzens, C. Harold Wills (who was Ford's chief engineer), John Dodge, and Horace Dodge organized the Ford Manufacturing Company. This company was formed to build the motors for the Model N, Ford's first four-cylinder, $500 car—a car that was the predecessor to the Model T. The manufacturing plant was located on Bellevue Avenue, in Detroit.

At the time it was said that the new company was organized because Dodge Brothers lacked adequate facilities. There may have been another reason. It is possible there was a thought of reducing the dividends being paid to John W. Anderson, Horace H. Rackham, and the heirs of John S. Gray. Ford, across the years, has always been opposed to sharing his business and, particularly, has he been opposed to paying profits to "non-productive stockholders." The stockholders mentioned had a financial interest, to be sure; but they gave no help in manufacturing.

In his book, *My Life and My Work* Ford wrote:

"The stockholders, to my way of thinking, ought to be only those who are active in the busi-

ness and who will regard the company as an instrument of service rather than as a machine for making money."

Later, and quietly, the company was absorbed by the Ford Motor Company.

In 1908 Ford's mind was turning to farm machinery and he built his first tractor in that year. He built it in a stable near the plant and used a Model B engine in it. His helpers on that job were James Smith, a mechanic, and James Walsh, a pattern maker. Quite a few years were to elapse, however, before he offered a tractor for general sale and then, of course, the new machine was greatly different than the one worked out in 1908.

Edward S. Jordan was another who started off to the automobile training school in 1907. Jordan, losing his job as editor of the house organ for the National Cash Register Co., of Dayton, was visiting relatives in Kenosha, Wisconsin, and was offered the position of advertising manager for the Thomas B. Jeffrey Company, makers of the Jeffrey car. He took it.

For the next seven years he developed his advertising and selling abilities until, in 1915, he was talking with a group of wagon manufacturers in Dallas. They were discussing the "saturation point" in the automobile market. Jordan was convinced that such a problem could never be

presented until every person had a car—and no car wore out. He made some sort of a trick sentence out of the expression and was so well pleased with it that he added:

"If I had three hundred thousand dollars and a bunch of young fellows who knew how to sell I could soon show you if the saturation point had been reached."

There was a pause until one man spoke up:

"That's the sort of talk I like to hear. Go ahead, Jordan, and raise the money. I'll back you with some and help you get the rest."

In January, 1916, Jordan resigned from the Jeffrey company and called a meeting of his friends in the University Club in Chicago. He showed drawings of the proposed Jordan car. He outlined plans for distribution. He grew enthusiastic and within an hour had subscriptions totaling $200,000. Then he went to Cleveland and talked with bankers and investors. They told him they would advance needed additional sums if he would locate in Cleveland. He did.

When Durant was forced to resign from General Motors in 1910, the bankers named Charles W. Nash as president of the Buick Motor Car Company. It was a wise choice. Nash had gained manufacturing and financial experience in the Durant-Dort Carriage Works where he

had started as a trimmer at a wage of one dollar a day.

Nash found need for all his experience and all his intelligence in the new job. He had to juggle the three high explosives of business:

Depleted finances.

Excessive inventories.

A bad product.

If he dropped any one of them it meant, in all probability, the wrecking of the entire structure, for the foundation of General Motors was Buick.

How well he succeeded can best be told by writing:

Within two years he had reduced inventories to the point where they were no longer of more than detailed concern; he had junked the old Buick and had replaced the car with a six-cylinder model that was a quick success; the company was in a strong position financially.

For that accomplishment, Nash was named president of General Motors and, as his successor in Buick, the directors chose that young railroad man—Walter P. Chrysler.

That was in 1912.

Chrysler, leaving Oelwein, had become works manager of the Pittsburgh plant of the American Locomotive Company. Now, as Nash's successor, he had Nash's record immediately in front of him. In many ways his was a job that

was no easier than the one his predecessor had licked. In addition, Chrysler's training had been in railroads.

But, he knew automobiles. From the day he had gone into debt for one that he might take it apart to see what made it run he had been studying this new form of transportation. In a practical way he knew a lot about automobiles and, also, he had rubbed elbows with shop problems in the raw.

Not long after taking charge at Buick a request came through for an appropriation to build a larger sheet-metal plant. Chrysler investigated. He saw the real trouble was caused by congestion. He gave orders that part of the force should come to work at eight o'clock instead of seven and should work through the noon hour and, also, an hour later at night. During the noon hour and the last hour at night the plant was cleared of finished products and raw materials were substituted. In this way the men coming to work in the morning found everything they needed waiting and when they resumed work, after the noon hour, the shop was again in order.

After that evidence of what he could do, the bankers needed no more promises, from anyone, as to what Chrysler was destined to be. It was intelligence they needed—not additional facili-

ties—and Chrysler was there to supply the intelligence.

Albert R. Erskine was a vice president in the Underwood Typewriter Company when a banking friend told him that the Studebaker company was looking for an executive with financial experience.

"The job is worth twenty thousand dollars a year, to start," said the banker.

Erskine needed no prodding. He went after that job and he got it. He joined the Studebaker Corporation in October, 1911, and one of the first things he told his employers was:

"I want no office—not even a desk."

"How are you going to work?"

"Out in the different departments—learning how you do things," answered Erskine.

Through the next four or five months he acquired more than a working knowledge of the financial and commercial angles of the business and then made his recommendations. Clerical heads were lopped off, work was simplified, and the Studebaker company saved considerable money in the process, at the same time greatly increasing its own efficiency as a producing organization.

In December, 1913, Erskine was elected executive vice president and in July, 1915, was chosen president. He was still immersed in the

task of developing the Studebaker sales organization and the Studebaker car when war with Germany became imminent. Realizing the impossibility of keeping out of the conflict, Erskine, two months before the declaration of hostilities, sent this telegram to President Wilson:

"Studebaker factories, of course, are at the disposal of the Government. Any orders given will receive preference and clear right-of-way."

President Wilson sent a letter of thanks and when Congress did declare war Studebaker was one of the first of the automobile companies to go into war work. Probably, it was the first to offer its manufacturing facilities to the government.

Alvan Macauley was sitting at his desk in the general manager's office of the Burroughs Adding Machine Co., in Detroit, one day in 1910 when a call came to him asking if he would accept the post of general manager of the Packard Motor Car Co. The Packard company was then making a four-cyclinder car and its production was about 2,000 automobiles a year.

Macauley, still in his thirties, was aware of the experience Joseph Boyer, his superior in the Burroughs organization, had with Packard. He recalled that Boyer had told him of selling out to the Algers. He also knew that Boyer had often regretted the move. The industry was

new. It offered tremendous possibilities, and Macauley realized here was an opportunity that was not likely to repeat itself—leastways, not for some time. He accepted and his acceptance has carried him into the presidency of Packard.

William S. Knudsen, a young Danish immigrant, had just completed his first real assignment for the Ford Motor Company. After weeks on the road, studying Ford problems and visiting various branches, Knudsen had returned to Detroit and was starting to write his report when he was told:

"Mr. Couzens wants to see you."

Knudsen, tired and irritable, kept on writing.

"Mr. Couzens wants to see you—now," insisted the voice.

Getting up, Knudsen responded to the summons. He knew Couzens rarely sent for people and as he reached the general manager's office he braced himself for bad news.

Couzens looked up as he entered and asked:

"Are you Knudsen?"

"Yes, sir."

"Sit down. I just want to tell you that the Ford Motor Company appreciates what you have accomplished on your road trip." Knudsen started to explain that he had not completed his reports, but Couzens interrupted: "We know what you have done. Rather than compliment

you with words we believe in something more substantial."

The general manager reached into his desk and drew out a check. It was for a sizable sum, running well up into the thousands of dollars. He handed it to Knudsen and inquired:

"What are we paying you now?"

Knudsen told him.

"All right. Your salary will be double that amount, starting now. That's all."

Knudsen rose to power in the Ford Motor Company, resigned years later, went with Ireland & Matthews Manufacturing Co., in Detroit, then joined up with General Motors. He is now president of the Chevrolet division and under his guidance Chevrolet became the first company successfully to challenge Ford in the low-price field.

CHAPTER THIRTEEN

When Bread Lines Were Forming

A SPATTER of rain, hard-driven, rattled against windows. There was a cutting sharpness to it that presaged hail riding down the wind—and snow before morning. From out of the northeast, across from Hudson's Bay, down from Canada and over the Lakes, a gale was ripping in on Detroit. Winter was coming to spend its ruthless force in a city where bread lines were forming; where men were trudging home, of late afternoons, after weary search for work.

An ash tray at his elbow, a reading lamp at his back, and stretched out comfortably in a deep-cushioned chair, a square-jawed man, unlighted cigar between his teeth, was reading a current issue of a monthly magazine.

Suddenly he dropped his feet to the floor, straightened his back, and glanced sharply around . . . hail was cracking against the windows beside him. It annoyed him. No, that isn't quite as it should be written. The crescendo of the storm hadn't disturbed him; something else, inside of him, had been stirred and the beat-

ing hailstones were only staccato notes to the tumult of his own thinking.

James Couzens, general manager of the Ford Motor Company, was being stirred—made a little ashamed—by an editorial in the magazine which expressed this thought:

"American employers of labor must pay their workmen better wages. But—no one firm can do it because no one firm is big enough to assume such a leadership and, by assuming it, compel others to do likewise."

Couzens sat by his window for a long time that night, looking out. Bunched forms, hurrying by, worried him. He wondered if, by chance, they might be idle men going home to frightened families. Perhaps, Ford employees. Because, a few days before, the Ford plant had shut down that it might take its annual inventory. Other automobile plants were likewise closed. Thousands of men were out of work. Christmas was supposed to bring happiness—this year families were hungry and cold.

But Couzens didn't sleep well that night. Here he was general manager of the largest single organization in the country. He took pride in the size of the institution that had been built for Ford. Often, he and Ford had discussed, together and alone, increasing their working force so as to give more employment. As

far back as 1909 they had gossiped about four-hour shifts and five working days each week. They had never been able to put either of the ideas into effect because the factory system could not withstand frequent shifts without lowering production speed. And, too, they feared that short shifts would influence their men into holding additional jobs with other organizations.

He thought of all those discussions—of the bonus plan that had been installed for certain executives in 1908 and his mind worried over what could be done for the rank and file, and how any plan for the improvement of wages and working conditions could be managed. Those who have followed Couzens as general manager of the Ford company, later as police commissioner in Detroit, then as mayor and now as an argumentive force in the United States Senate, may have difficulty believing he would worry over the plight of another. If they have difficulty believing, it is because they do not know Couzens. For that matter, few do.

He arose the next morning, ate his breakfast in silence, and went to his office at the Ford plant, in Highland Park. Along towards noon a disturbance outside came to his ears. Getting up from his desk, he went to a window and saw several thousand workmen milling around in the

streets. They were looking for jobs. And, there were no jobs.

Couzens went looking for Ford. He found him in another office.

"We're responsible for those men being out of work because we don't pay them enough money to live on," he stormed, calling Ford to the window.

"Don't pay them enough?" questioned Ford, puzzled. "We pay as much as anyone pays."

"That doesn't excuse us. The Ford Motor Company isn't paying high enough wages to its people. That's what concerns me. I realize, as well as you do, that the automobile business is a seasonable business and that we aren't responsible when slack periods come. That is, we aren't responsible for such periods. We should, however, give our people wages that would permit them to save against the time when we have no work for them."

"What are we paying now?" asked Ford.

"It varies. The average is somewhere between two dollars and sixty cents a day and two dollars and seventy cents."

"What do you think we should pay?"

"Five dollars a day."

"Five dollars a day?"

"Yes."

Ford looked at Couzens in amazement. "Do

you know how much that would cost the Ford Motor Company a year?"

"About ten million dollars, according to our present employment."

Ford became excited. Couzens argued. They both argued. Finally, Ford said he would talk over the matter with Peter Martin, general superintendent of the plant.

The following day he went back to Couzens.

"Martin says he is willing to pay three dollars a day. That five dollars a day will cause trouble. That other firms—"

"I know how Martin thinks," interrupted Couzens. "He thinks if we pay five dollars a day it will cause a general disturbance in the labor market. That we will be flooded with requests for jobs. What if it does? And, what if we are? We'll get the pick of the workmen and you know, as well as I do, that a good workman is worth five dollars a day. You and I have talked this over enough—not this plan, exactly, but some similar plan—and each of us realizes that the division of our earnings between capital and labor is unequal and that we ought to do something in the way of a relief that is suitable to our business.

"I do not feel sure it is the best but there is one point on which I am certain—

"This will be a start. It will create an ex-

ample for others. You, yourself, have often said that is what we should do."

"Well, I'll go back and talk with Martin," returned Ford.

Another twenty-four hours and Ford and Couzens were again in conference.

"Martin says he'll split the difference with you—and make it four dollars a day."

"No. Five dollars a day—or it stays as it is."

Ford finally threw up his hands. "All right," he assented.

Horace H. Rackham, a director in the company, was going down the hall. The two men saw him. Called him. Explained their purpose. Rackham listened, in speechless surprise. He could but nod his head when Couzens suggested:

"The three of us make a quorum. Let us consider this a meeting."

Thus, the greatest of all profit-sharing plans received the only legal ratification it needed.

It was typical of Ford and Couzens to put it into effect as soon as a decision had been reached.

On Monday morning, January 5, 1914, telephone calls were made to the various newspaper offices in Detroit and a request was made, of each, that it have a representative in "Mr. Couzens' office at ten o'clock."

Wonderingly, reporters grouped themselves in chairs about the general manager's desk. Henry Ford sat over in a corner, his chair tilted against the wall, an enigmatic smile hovering about his thin face.

Couzens, looking up from two hastily typewritten sheets, glanced around, made sure all were seated, and told his secretary to shut the door and not disturb him until further notice.

"Better get ready," he counseled. "Please write as I read."

He picked up the typewritten sheets, waited for the reporters, and then slowly recited:

"The Ford Motor Company, the greatest and most successful automobile manufacturing company in the world, will, on January 12, inaugurate the greatest revolution in the matter of rewards for its workers ever known to the industrial world.

"At one stroke it will reduce the hours of labor from nine to eight, and add to every man's pay a share of the profits of the house. The smallest amount to be received by any man twenty-two years old, and upwards, will be five dollars a day. The minimum wage is now two dollars and thirty-four cents per day of nine hours.

"All but ten per cent of the employees will at once share in the profits. Only ten per cent of

the men now employed are under twenty-two and every one of those under twenty-two will have a chance of showing himself entitled to five dollars per day.

"Instead of waiting until the end of the year to make a distribution of profits among their employees in one lump bonus sum, Mr. Ford and Mr. Couzens have estimated the year's prospective business and have decided upon what they feel will be safe to award the workers. This will be spread over the whole year and paid on the regular semi-monthly pay days.

"The factory is now working two shifts of nine hours each. This will be changed to three shifts of eight hours each. The number employed is now about fifteen thousand and this will be increased by four thousand, or five thousand. The men who now earn two dollars and thirty-four cents per day of nine hours will get at least five dollars per day of eight hours.

"This will apply to every man of twenty-two years or upward without regard to the nature of his employment. In order that the young man, from eighteen to twenty-two years of age, may be entitled to a share in the profits he must show himself sober, saving, steady, industrious and must satisfy the superintendent and staff that his money will not be wasted in riotous living.

"Young men who are supporting families,

widowed mothers, younger brothers and sisters, will be treated like those over twenty-two.

"It is estimated that over ten millions of dollars will thus be distributed over and above the regular wages of the men."

Exclamations interspersed the reading and at its conclusion some started for the door but hesitated as they heard one of their party talking to Ford.

"Does this mean that every man in the Ford employ will receive five dollars a day?" a high-pitched, excited voice asked.

"Within the stipulations laid down in what Mr. Couzens read," confirmed Mr. Ford. "It applies to all. The commonest laborer who sweeps the floor will be paid five dollars a day."

"Just a moment, please," requested Mr. Couzens. "You may all have telephones, when you want them. Mr. Ford wants to explain some things. And, so do I.

"It is our belief that social justice begins at home. We want those who have helped us to produce this great institution and are helping to maintain it to share in our prosperity. We want them to have present profits and future prospects. Thrift and good service and sobriety all will be encouraged and recognized."

"If we are obliged," said Mr. Ford, "to lay off men for want of sufficient work at any season

we propose so to plan our year's work that the lay-off shall be in the harvest time; July, August, and September, not in the winter. We hope, in such case, to induce our men to respond to the calls of the farmer for harvest hands and not to lie idle and dissipate their savings. We shall make it our business to get in touch with the farmers and induce our employees to answer calls for harvest help.

"No man will be discharged if we can help it, excepting for unfaithfulness or inefficiency. No foreman in the company has the power to discharge a man. He may send them out of his department, if they do not make good, but the man is then sent to our clearing house, covering all the departments, and is again repeatedly tried in other work until we find the job he is suited for, provided he is honestly trying to render good service.

"We believe in making twenty thousand men prosperous and contented rather than follow the plan of making a few slave-drivers in our establishment multimillionaires."

That noon Couzens was sitting at lunch in the Detroit Club with Harry P. Hetherington, managing editor of the Detroit *Journal*. Naturally the topic around the table concerned Ford's announcement. Turning to Couzens, the editor said:

"Jim, I am going to New York tonight. I will see Melville Stone, of the Associated Press, tomorrow. I will try and talk him into carrying your five-dollar-a-day-story on the wires, tomorrow."

Couzens smiled. "It has already reached Europe," he said. "Cablegrams and telegrams were beginning to come in before I left the office. We are being fairly swamped with congratulations—yes, and with maledictions from other employers of labor."

Hetherington was surprised. "I don't understand it. The Associated Press has always leaned backwards against giving publicity to the automobile industry."

"This is scarcely publicity," dryly returned Couzens. "It is the beginning of a new social structure."

The reason for telling this sidelight is to indicate how little even a fine newspaperman (and Harry P. Hetherington was that, as one of the authors can testify, inasmuch as he worked under him for ten years prior to his death) understood the importance of the announcement.

Bankers in Detroit said "it will have a bad effect on the labor market, and the city." Bankers, in other cities, grew vehement and issued instructions to their loan committees to watch the credit of "any customers doing business with

Ford." Newspapers were divided in their opinions. Some were elated; others—well, here is a portion of an editorial in the *New York Times*:

"The theory of the management of the Ford company is distinctly Utopian and runs dead against all experience. The manufacturing industries of the country cannot follow an example which requires an eight-hour day and a standard of wages that from the scant outlines of the Ford Motor Company's plan seems to be approximately double the prevailing rate.

"Under the operation of general laws, trade seeks its level almost as certainly as water. The exceptions, the 'peaks' here and there, are rare, artificially maintained, and the invariable tendency is toward their disappearance. The natural operation of this law was seen today when 10,000 men struggled, or actually fought, around the works of the Ford company in Detroit clamoring for jobs. The man who offers extravagant prices for goods gets all the goods, at least more than he can take. Serious disturbances in the automobile industry labor market will, of course, follow. The Ford company cannot hire all the men, yet there will be unrest and dissatisfaction in the shops of other companies. Strikes are likely enough, and conditions of peace cannot be looked for until the equilibrium is, somehow, restored.

"Possibly an industry that has reached an enormous business expansion in so short a time may be exceptional to a degree which will permit the working out of the Ford company's profit-sharing plan without acci-

dents, or setbacks. If so, it will be something new in manufacturing experience. We think the weight of opinion will decidedly incline to the side of doubt, or to prophecies of certain failure for the experiment so manifestly based upon a vision of universal human uplift through a single venture in the field of beneficence."

In reply, Ford said:

"I cannot see how the labor market will be disrupted. Other manufacturers can treat their labor the same way. Again, it's up to the management and centralization. All manufacturers ought to manufacture only a small number of articles.

"We expect to make twenty to twenty-five millions of dollars next year. We made twenty-five millions last year. The plan is permanent but we can't estimate several years in advance how much the distribution will amount to, each year. It may be more. We can't tell."

The *Wall Street Journal* felt this way about it:

"Had Henry Ford set aside a fund that would insure continuance of present wages paid to faithful employees, or a pension of half their wages after years of faithful service, it would have been scientific, and according to the highest ethics and the true laws of giving.

"But to inject ten millions into a company's factory, and to double the minimum wage, without regard to

length of service, is to apply Biblical or spiritual principles in the field where they do not belong.

"In the material world such rewards to the early and late laborers of the vineyard do not mean conversion of all to an improved or higher life. They do mean material, financial and factory disorganization.

"Such unscientific rewards may get advertising and get riddance to Henry Ford and his burdensome millions, but they are unscientific and not true charity in its broadest sense.

"They introduce instantly what Henry Ford has fought, the gambling element. If this principle is extended, roving bands of labor will seek factory employment by bribes of gifts or temporary good behavior, where easy fortune may be thought to lurk. People will not work for wages; they will gamble their labor for gifts, largess, and bonuses.

"If the newspapers of the day are correctly reporting the latest invention and advertisement of Henry Ford, he has in his social endeavor committed economic blunders, if not crimes. They may return to plague him and the industry he represents, as well as organized society."

Ford and Couzens were not worrying over the dire predictions that were being made. Each man had communed with himself. Each knew he had done his best work when not worried over finances. Ford often told Couzens of the years when he was working on his first car—of later years when he worked on the Model T.

"I never thought of the money I might make out of it," he often said. "I wanted to make a motor car that would almost drive itself and I devoted all my spare thinking to that one thing. I had a job and my pay was always sufficient to take care of my family. Because of that I was always glad to get it at regular intervals but my mind, first, last and all the time was on what I was doing. Having worked at a bench myself I am confident labor will always be satisfied if it is convinced that capital is doing the best it can for the workingman."

The balance sheet which Ford and Couzens had in mind when they announced the plan follows:

ASSETS

Cash on hand and in banks	$13,225,710.82
Michigan mutual tax exempt bonds at cost	1,283,943.59
Accounts receivable	448,233.98
Merchandise inventory at cost	9,046,171.68
Other investments	7,433.32
Prepaid expenses	215,259.29
Real estate	1,540,483.42
Buildings and building fixtures	4,615,156.82
Factory equipment	676,589.44
Office furniture and equipment	77,357.60
Power plant	526,945.24
Machinery	305,962.09

Tools	824,901.04
Patterns	92,710.13
Machinery, tools and equipment at branches	89,837.13
Patents	57,224.27
	$35,033,919.86

LIABILITIES

Accounts payable	$ 3,049,586.86
Accrued payrolls	191,940.70
Accrued salaries	24,169.30
Accrued expenses	266,119.43
Contract rebates	25,960.00
Reserve for employees bonus	134,999.96
Reserve for bad debts	3,510.55
Reserve for depreciation of fixed assets	1,061,805.25
Reserve for depreciation of patents	57,224.27
Reserve for fire insurance premiums	34,059.63
Reserve for unearned profits (branches)	60,370.23
Capital stock	2,000,000.00
Surplus	28,124,173.68
	$35,033,919.86

Thirteen years later—or, on December 31, 1926—Hornblower & Weeks offered $1,000,000,000 for the company and, according to testimony of John W. Prentiss, partner in the investment house, it was expected, if the offer were

accepted, to resell the company to the public for $1,250,000,000, by an issue of securities.

There is no question but that the introduction of the $5-a-day wage gave the company tremendous impetus. It changed the economic life of a nation. It made Ford the outstanding industrialist in the world's history.

Couzens, the man who conceived the idea in its final, ratified form, resigned from the Ford Motor Company less than two years afterwards.

One morning, in October, Ford came into his general manager's office. The air was tense. Acrimonious discussions had been the order between the two men for a week or more. Direct, as always, Couzens stared at Ford and said:

"Henry, I've stopped that article in the *Ford Times*."

"You can't stop anything," snapped Ford.

"All right. I'm quitting."

"Better think it over, Jim."

"I've done that. I'm through."

"What are you going to tell the public?"

"I don't know."

This happened on Tuesday, October 12, 1915. The following day the resignation of James Couzens was formally presented to the board of directors to take effect November 1. Frank L. Klingensmith took his place as vice president

and treasurer while Edsel Ford, at twenty-two years of age, became secretary of the company.

Couzens issued a statement which follows:

"I could not agree with Mr. Ford's utterances on peace, and the Allies' war loan and national unpreparedness. This has been brewing for more than a week. For some time I have disapproved of the manner in which Mr. Ford has been giving statements to the press. His statements on these and other matters disgusted me. I told him so and we had it out.

"What Mr. Ford has to say is considered by many to be of wide importance, because the business of the Ford Motor Company has been built up to such magnitude that the public eye is always on him.

"I disapprove of his views on preparedness, and it was of so serious moment to me that I decided to break relations with him. The friendly relations that have existed between us for years have been changed of late. Our disagreements daily becoming more violent.

"I finally decided that I would not be carried along on that kind of a kite. We started in the automobile business thirteen years ago and it was through my efforts that the Ford Motor Company was built up around one man—Henry Ford.

"I have never in my life worked for any man.

Even when I was a car checker, a few years ago, I had no boss; but I was, and am today, willing to work with any man. I was willing to work with Henry Ford, but I refuse to work for him.

"The world is perhaps interested in the fact that I have resigned from the Ford Motor Company, because the concern occupies such a unique position in the business world. Concerning the personal differences between Mr. Ford and myself, they ought not to be of public interest."

Mr. Ford made a brief statement to this effect:

"Mr. Couzens has taken the action in this matter and I feel it is his privilege to tell why he did it, if he cares to. Mr. Couzens' resignation was not entirely unexpected. I have seen that there was a possibility of it for a week, or more."

The article to which Couzens objected was one in which the thought was expressed that Lord Reading, and other Allied commissioners coming to Canada in search of war loans should be run out of the country.

CHAPTER FOURTEEN

"Own the Basket, and the Eggs, Too"

THROUGH the years Ford had been expanding another company had been keeping comparative pace. Dodge Brothers. Since the beginnings of the Ford Motor Company, the brothers had been engaged in manufacturing parts for the Ford car and their plant investment had grown large.

One day, in 1913, they were together in a downtown department store in Detroit and they met Howard B. Bloomer, their friend and legal counselor. The three men, as was natural, began discussing business conditions. They stepped aside, away from the shopping currents, and listened when Bloomer suggested:

"Why don't you brothers build your own car?"

"Why should we?" returned John Dodge. "We've got a heavy stake in the Ford Motor Company and, besides, we have a contract for the building of parts. Let Ford and Couzens have the grief of selling automobiles. We have troubles enough of our own without adding to them."

"You're likely to have more serious troubles if you don't," observed Bloomer.

"What do you mean?" chorused the Dodges.

"Supposing Ford tells you 'after 1914 we won't want any more parts from Dodge Brothers,' what will you do?"

"Not much danger of that," declared John Dodge. "Besides, if he did, we could get plenty of contracts from other manufacturers."

"Granting that but, in the meantime, you would have lost money. Your plant equipment is too heavy to have it all depending upon one customer. You've got too big an investment not to safeguard it better than you are doing."

"The same old pessimist," laughed John, putting his arm about Bloomer's shoulders.

"Not at all. Just as much concerned now as on that day when you brought me your first seven hundred dollars and asked me to protect it, when you were starting in business."

John Dodge continued to chuckle. "Then you don't believe what Andy Carnegie says?"

"What was that?"

"I read a little while ago where he told someone to 'put all his eggs in one basket—and then watch the basket.' "

Bloomer weakened the Carnegie platitude by snapping:

"Yes, I believe that, if you own the basket.

This basket belongs to Ford; the eggs belong to you. What is to prevent Ford from kicking over his basket and breaking your eggs?"

The Dodges were impressed but unconvinced. Bloomer visited them the following day. Continued the argument. Finally John Dodge threw up his hands.

"I've got you, Howard," he admitted. "You're right."

Horace Dodge had taken no part in the discussion. But, he had been listening. Grinning at his brother, he drawled:

"My heavens, John, it has taken you a long time to see that."

Their contract with Ford stipulated that a year's notice had to be given by either party wishing to break the agreement so in July, 1913, the Dodges notified The Ford Motor Company they would not continue after July 1, 1914.

With the painstaking thoroughness that characterized everything they did, John and Horace Dodge began getting together an organization. They engaged Arthur I. Philp and gave him authority to gather in the finest executive talent he could find. Candidates were scrupulously examined—one after another they were rejected with, only occasionally, one of them being accepted. Advertising agencies were called in—a dozen of them. All were dismissed. Finally,

Philp again summoned to his presence one of those he had rejected.

"Young fellow," he said, "years ago you made me sit up and pay attention to a two-cycle car. I didn't believe in two-cycle cars but you got me so excited over them that I almost bought one. Now, if you will do just as good a job as you did for the old Elmore I won't talk to another advertising man in America."

The two men went to work—together.

At that stage in their career the brothers looked upon business entirely through manufacturing eyes. A meeting was arranged by Philp for the new advertising counsel to have lunch with John and Horace Dodge. John Dodge was irascible. Marketing, to him, was largely a matter of building a good product and selling it at a fair price.

He acknowledged the introduction by barking:

"Horace and I go into the factory and sweat blood to save a tenth of a cent and you fellows turn right around and throw away ten per cent."

The advertising man seized upon this remark and made it his theme. "Here," he said to himself, "are two honest manufacturers. The thing to do is to capitalize them and through them their car."

After the brothers had departed, there fol-

lowed a long discussion between the sales and advertising executives. The process for building Dodge Brothers in the minds of the American people had begun. Words—advertising words—were chosen and weighed and sifted with meticulous regard for their precise meaning. The car had not even been built but that did not frighten because the advertising counsel had been through a similar experience—with the Lelands and their Cadillac car.

At last the announcement was ready. With scarcely anyone knowing what the product was going to be like, or in what price class it would rest, more than 22,000 applications for dealers' contracts were received.

The brothers, although they did not understand the method, were beginning to see the effects of the process. They were broad enough to permit those who were responsible to continue as they had started . . . to dramatize the homeliness of "honesty is the best policy" while the brothers did their part in living up to the things advertising attributed to them.

So well did they play their parts that, even five years after their deaths, when the business was sold, the purchasing price took dollars-and-cents cognizance to the extent of approximately $70,000,000 for goodwill.

John and Horace Dodge, however, had built

reputations as automobile manufacturers before 1914. Success was expected of them although no one could foresee how successful they were to be. In that same year another, and quite untried in the industry, was to be given his opportunity. Albert R. Erskine.

In December, 1913, Erskine had been elected executive vice president of the Studebaker Corporation. Thus, tradition in transportation was placed in his hands.

It was spring. A robin, high in the maple tree, set forth its mating call. Wisps of clouds scampered across the sky. Towards Gettysburg bells tinkled as sheep climbed the hills. The countryside was pink with blossoms of the hawthorn—fragrant with their scent. The elm, the ash, the basswood, were budding and bursting into bloom. The willows, along the river's edge, were reaching out with new shoots of green while the river brawled in its freedom from the ice of winter.

From the wooden shed, near a bend in the turnpike, came the ringing of a blacksmith's hammer. John Studebaker, first of the Studebakers in American transportation, was fashioning iron tire—driving it into place against a hickory rim. Already, in this little community near Gettysburg, Pennsylvania, John Studebaker had made a reputation as a blacksmith and

wagon maker. It was in 1835 and he was migrating west—getting ready for the trek to far-away Ohio.

His covered wagon, with its top bows bent forward and back and covered with waterproof duck, was nearly complete. Now, with the lifting of the wheel on the axle, it was ready. Studebaker clamped the bolts into place, tossed his hammer and wrench under the front seat, picked up the reins and drove his four-horse team over to where his wife, Rebecca, and their six children were waiting. Household goods neatly packed in two smaller wagons he had built, he gathered his family to him, turned the horses' heads towards the west and the little cavalcade set out for Ashland, Ohio.

Arriving there, he purchased a bit of property, built a house and shop, and chiseled above the door:

"Owe no man anything, but to love one another."

At Ashland three more sons were born and one daughter, Maria. The children numbered ten, equally divided, the boys being Henry Studebaker, Clement Studebaker, John Mohler Studebaker, Peter Everst Studebaker, and Jacob Franklin Studebaker.

As the sons developed into manhood their father urged them to get their own starts in life.

Following his advice, Henry and Clement went to South Bend, Ind.; as the years passed the other brothers joined them and, finally, John Studebaker, his wife and their daughters.

Henry and Clement Studebaker established the firm of H. & C. Studebaker, blacksmiths and wagon builders, in 1852. Their joint capital was $68 and two forges. John Mohler Studebaker came with them in 1853, remained a few months and was caught in the gold rush. With the aid of his brothers, he built a wagon which he traded for his passage and board to Hangtown (now Placerville), California.

Fifty-nine years afterwards at a reunion dinner to friends of his youth, in Placerville, he recalled those days of his youth. In *The History of the Studebaker Corporation* the story was told:

"We were more than five months on the road, and landed in August, 1853. I had but fifty cents in my pocket. Although that was my only earthly possession, my spirit was not daunted for we had been led to believe that all we had to do was to go out on the morrow and dig all the gold our hearts could desire.

"While the hubbub was going on, a man came up and asked if there was a wagon maker in the crowd of new arrivals. They pointed to me and he asked:

"'Are you a wagon maker?'

"'Yes, sir.'

"He offered me a job in his shop and I replied:

"'I came to California to mine for gold.'

"After he had gone a man stepped up and said: 'Will you let me give you a little advice, young man?' I replied in the affirmative, and he told me: 'Take that job and take it quick.' He said there was plenty of time to dig for gold and I was so impressed by his manner that I went to work for the wagon maker.

"He wanted me to make wheelbarrows for the miners and arranged to pay me ten dollars each for my work. The tools were poor, and material only pitch-pine lumber. I stuck to my job, made many wheelbarrows, and put my money in the bank.

"I soon found out that hundreds and thousands of miners never made a cent, but those who stuck to good jobs, at steady wages, and saved their money did well."

After five years in California, Studebaker heeded the pleas of his brothers and returned to South Bend. He brought back with him $8,000 in gold nuggets, strapped in a leather belt. He bought out his brother Henry and with Clement Studebaker began the real development of the business.

Another brother, Peter, a merchant in Goshen, Indiana, was induced to join with them. He was sent to St. Joseph, Missouri, an assembling station for wagon trains, and established a distributing depot for Studebaker wagons. The Mormons became their customers, and as the fame of the Studebaker wagon spread across the Western empire, branch houses were opened in Salt Lake City, San Francisco, and Portland. The Civil War came and, according to the Bureau of Census report for 1870, H. & C. Studebaker were the most important point of supply for the war department in furnishing the armies with overland transportation.

On January 1, 1868, the net tangible assets of the firm amounted to $223,269.06 and on March 26, 1868, a corporation was formed. It was called Studebaker Brothers Manufacturing Company. With dealers established in important cities through the United States, the company invaded Europe and became one of the largest manufacturers of horsedrawn vehicles in the world.

At the outbreak of the Boer War the British government bought Studebaker wagons for the use of the South African armies and, after hostilities had ceased, Lord Roberts, in his official report, wrote:

"Wagons were imported from the United

States, and these proved to be superior to any other make, either of Cape or English manufacture."

Most of these wagons were Studebakers.

While the Boer War was in progress, the Studebakers were becoming interested in automobiles. In 1897 they began experiments and in 1899 were building bodies for electric runabouts. In 1902 they began manufacturing an electric car, as well as a truck. In 1904 they added a gasoline automobile and continued manufacturing both lines until buying out the E-M-F business.

Thus, was tradition—the tradition of carriages for Presidents, covered wagons for pioneers, transports for warring armies . . . a family product of nearly eighty years—passed along to Albert R. Erskine. Passed along at a time when another, who had gained experience selling horsedrawn vehicles, was deploying his forces for the discomfiture of a beleaguered enemy.

CHAPTER FIFTEEN

"Durant is Licked?"

Forced from control of General Motors, Durant made no effort to regain his place—that is, no immediate, apparent effort. For weeks and weeks he did little else than scrutinize the industry. Studying. Planning. He did not even participate in the arguments of the General Motors voting board of trustees, of which he was still a member.

"Durant is licked," they probably said to themselves. They could have been more watchful for, by his passiveness, Durant was lulling them to sleep. Which was his first move—to be sure that those who had taken over what he had built would be unsuspecting. While he was crooning his cradle song, his mind was swiftly turning over events and reaching out for a point from which to strike.

Perhaps there was superstition in his thoughts for they kept going back to that little city in Michigan—Flint—where he had begun his striding across the industrial and financial world. Friends were keeping him informed and one

forenoon he dropped into a small automobile plant owned by William H. Little. A car, designed by Louis Chevrolet, a racing driver, was being manufactured. Durant examined the machine, saw possibilities in it, and bought the business.

In New York they heard of his purchase and grinned. Rather derisively they grinned. Nor, did the grins leave their faces when it was later announced that Durant had also purchased the Republic Motor Company, of Tarrytown, New York. Had they known what was shaping itself behind the bland countenance of their foe . . . but, they didn't. Even so, it might have made no difference. What need for worry over the acquisition, by anyone, of two limping, small automobile plants? General Motors was pretty big, you know.

Durant dropped the name of Republic and substituted Chevrolet. The Tarrytown factory was converted into an assembly plant. Tarrytown, removed from New York by only a few hours, became a base of operations for Durant. He knew it to be a much simpler matter to interest capital in a going concern, near at hand, than in one in Flint, hundreds of miles distant. He knew the automobile business was strange to Eastern capitalists.

Those two things—strangeness of the busi-

ness, and the proximity of it—were what he built on. In all likelihood he was building deeper than even he, with all his optimism, hoped.

Chevrolet, as a car, began attracting favorable attention. In the two years ending August 14, 1915, nearly 16,000 vehicles were sold and Durant was able to show a net profit of more than $1,300,000. With these figures carefully checked, and certified, he went to see the Delaware du Ponts. There he met John J. Raskob.

Raskob, as a young man, had been secretary to Pierre S. du Pont and through years of association had risen high in the confidence of his employer. High in his confidence and high in the councils of the organization. Of a financial turn of mind, Raskob had followed the career of Durant and, likely enough, had admired the agile mind of the man who could plan as Durant had planned—and who, even now, was planning as Durant was planning.

Raskob had dreams of his own. Dreams of power. Dreams of great wealth. Perhaps, listening to Durant, he had the first dreams of what he would do were the time to come when he would sit where this man had sat—and was determined to sit again. Raskob was convinced of the existence of tremendous opportunities in the automobile industry and he favored an alignment with Durant. Pierre S. du Pont hesi-

tated. Raskob urged. Finally had his way. It was a way that was to lead him to high places for, in a few years, he was to become a vice president and a director in General Motors and was to assume the chairmanship of the finance committee of the corporation.

It was Raskob who was to put into effect what Durant had so often talked of—the General Motors Acceptance Corporation, a subsidiary for the financing of sales of automobiles on the instalment basis. It was Raskob who was to develop the Managers Securities Company, another General Motors organization, which has as its principle the taking in as partners in the management of the business of some eighty-odd executives—eighty-odd executives who were to be turned into that number of millionaires.

Raskob . . . in physical appearance the antithesis of what some of us have been led to expect of financial despots. No overhanging jowls here, no cold, appraising, analytical eyes, no harsh, domineering voice, no pounding of fists on marble desks—none of these characteristics in Raskob. Slight, short, small hands and small feet, the eyes of a dreamer, a voice of shyness, the face of a poet—Durant, seeing him for the first time, could not have suspected the steel which was hidden behind the sensitive face.

Early in 1915 Durant, Pierre S. du Pont, and

Louis G. Kaufman, president of the Chatham & Phenix National Bank, of New York City, began buying into General Motors. They sought common stock in the open market. They cloaked their movements and it was not until early in the summer that those in control of the company began to suspect the existence of powerful interests back of the steady rise in the market.

On January 2, 1915, General Motors was quoted at 82. It went to 100—to 150—to 200—to 250 . . . and kept going. All shares offered were snapped up and those who were foolish enough to sell short soon ran for cover. It was a stock movement that wouldn't and, seemingly, couldn't be stopped. And still the identity of the buyers remained a mystery.

Durant began consolidating behind the lines. On September 23, 1915, he organized the Chevrolet Motor Company, of Delaware, and on October 21, Hornblower & Weeks, a brokerage firm, announced an offer of $6,800,000 worth of the $20,000,000 authorized capital of the combined Michigan and New York companies.

Because Durant's name was used in connection with the stock, there was no difficulty selling it. In truth, three weeks before the issue had been formally authorized the underwriting syndicate announced the books had been closed and

that the stock had been oversubscribed, ten times. With the completion of the refinancing, Durant approached stockholders in General Motors and boldly offered them Chevrolet certificates in return for their holdings in the older company.

Such was the magic of his name that acceptances became almost a matter of course. The stockholders in Chevrolet then voted to increase the capitalization to $80,000,000, all common, and, in addition, authorized Durant to issue Chevrolet stock for General Motors common stock at a ratio not to exceed five for one. The response to this offer was so great that it was closed on January 26, 1916.

General Motors stock, in the meantime, had reached 558 and the controlling executives were fully aware of the purpose of their erstwhile contemptuous enemy. That purpose—as they saw it, and they were right—was the absorption of General Motors by Chevrolet, a company that, but four years previously, had been capitalized at only $100,000.

While Durant was alienating General Motors stockholders, executives of the latter corporation were frantically composing circular letters to these same stockholders. In January eight members of the board of directors—Emory Clark, Thomas Neal, Charles H. Sabin, Charles S. Mott, Samuel F. Pryor, J. J. Storrow, Al-

bert Strauss and Albert H. Wiggin—sent a message to the stockholders urging them to accept another three-year voting trust, this to begin on October 31, 1916.

On March 18, 1916, another appeal was made. This was signed by a dozen stockholders "not connected with the management" and added that C. W. Nash, C. S. Mott, C. H. Sabin, E. W. Clark, J. J. Storrow, and Albert Strauss were willing to act as trustees for the proposed three-year voting trust.

Durant, watching the moves of his adversaries, was amused. Amused but not unmindful of possibilities. He knew there were powerful interests within General Motors—powerful interests other than trustees in the voting trust, who might thwart his plans. He set about to acquire their stock. So while the opposition was composing letters, reading replies, and commiserating with each other, Durant was forcing General Motors stock to a high level and was depending upon the avarice of men who would forget their dislike for him in the opportunity he was creating for the taking of huge profits.

His judgment of those men was correct. They took their profits.

About the middle of May he decided to move. He notified the directors that he, and his associates, had acquired control of General Mo-

tors and requested that a formal meeting be called. It was. At this meeting he declared that the Chevrolet Motor Company had, in its assets, 450,000 shares of the outstanding 825,589 shares of General Motors common stock.

The coup he had been planning for five years was a reality.

Charles W. Nash resigned as president of General Motors. William C. Durant, casual, calm, and with a faint smile twitching at the corners of his mouth, returned to the chair that, five years before, had been jerked from under him.

Not long afterwards James J. Storrow, Albert Strauss, and Emory Clark resigned from the board of directors.

Durant's genius for juggling the affairs of men and the businesses of men was never more graphically illustrated than by his swift, sure moves during this period of five years. All the while he was carrying on negotiations with du Pont, Raskob, Kaufman, and others in the building of Chevrolet and the enveloping movement on General Motors he was conducting what to him was a sideline but which, to almost any other man, would have been a gigantic undertaking.

Off on one side he was sparring with and closing in on a number of accessory and parts manufacturers. The Dayton Engineering Lab-

oratories Company, controlled by Charles F. Kettering, was one of the first acquisitions. Durant wanted Kettering for his organization but the young engineer was more interested in things of his own development and passed by the offers Durant was holding out to him. Durant, patient, waited.

Durant then went after the Remy Electric Company, the Hyatt Roller Bearing Co., The New Departure Bearing Co., and the Perlman Rim Co. The combination was named United Motors Corporations, and starting out as purely a holding company, it soon acquired the physical assets of its various divisions and, from the profits of operation, began investing into and buying up other accessory and parts concerns.

The dominant figure in the accessory group was Alfred P. Sloan, Jr., another of Durant's choices who was to emerge as one of the most important figures in the industry. United Motors was incorporated in New York on May 16, 1916.

Durant, with the strings of General Motors and Chevrolet tied into one ball, now set out to make a bigger ball. He planned to bring United Motors, and other companies in which he was more than academically interested, under a single banner—the banner of the family of General Motors. Within a couple of years he was

to succeed. It took him a little time because there were so many details to be arranged.

One of his major problems was to come soon. Henry M. Leland, in 1909, had sold the Cadillac Motor Car Company to Durant and this sale had really given impetus to the spectacular organizer's plan of power. Now, with Durant back in control, the two men found themselves in discord. There was but one escape for Leland—he resigned from the company with whose early success he had so much to do.

One of the authors of this book can never forget Henry M. Leland. I was projected into my first big selling task some twenty years ago. I was trying to interest Mr. Leland, and his son, Wilfred, in an advertising agency that suffered by comparison with advertising organizations much older, larger, richer, and more impressive. All were seeking the Cadillac advertising account.

Three days had been spent in heated, competitive sessions when Wilfred Leland turned suddenly and after repeating the name several times—as though reminiscently trying to link it with some incident of the past—asked:

"Do you know a poet named Frank MacManus?"

"No, sir."

Mr. Leland was silent for a moment. Then burst forth:

"O can't you see her standing at the portals of the world,
With her eager eyes exulting in the flag she's just unfurled,
The favorite of Fortune, and the mistress of the Fates,
The heir of all the ages, flinging back the futile gates,
That frown upon her progress, and dispute the mighty power
Of a goddess come to realize the glory of her dower!"

There were six other verses in an effort called "America." I tried, as best I could under the circumstances, to stop him but he had mounted his Pegasus and was off at full gallop. As he finished he turned and observed:

"That is my father's favorite poem—and mine, too."

I had to tell him that although I was no poet I did versify a little and the lines he had just recited were mine. That he had erred in the use of the first name. With that confession the counterfeit business man stood revealed as a poetaster. The sequel, however, was pleasant enough.

The Cadillac company, at that time, was facing difficulties. Mr. Leland frankly said so and

with his son took the writer to a locked room and showed a blackboard on which was the outlined sketch of a motor car. His voice betraying his emotion, Henry M. Leland confided that this unbuilt automobile was the only thing which could save the fortunes of the company.

"With nothing but that chalk sketch to go on," he asked, "can you arouse and hold the interest of the people until we can build and market the car six or eight months from now?"

With the rashness of youth I answered:

"Yes."

"How?"

There was a question. But words flowed and finally, in desperation, this statement: "I will try to put thoughts into the minds of men which will make them say every time they see a Cadillac on the street: 'That's a damn fine automobile.' "

Necessity demanded that the advertising man make good on his promise.

Due, in a measure, to advertising and due, in greater measure, to the integrity of Henry M. Leland the Cadillac company prospered from that day.

Resigning from the company, Henry M. Leland, and his son, organized the Lincoln Motor Car Co. So much did the name of Leland mean to Detroit that within two hours after the stock

subscription books were opened the issue was oversubscribed and bidders were offering a premium for shares.

Durant, prior to the resignation of the Lelands, had viewed, with some concern, the organizing of another company in which an old associate was prominent. Charles W. Nash, after casting around for an outlet for his manufacturing experience, bought the Thomas B. Jeffrey Company, in Kenosha, Wisconsin. In July, 1916, he organized the Nash Motors Company. He was to make it into one of the outstanding successes in an industry of successes —and he was to do it with the clouds of war closing in on the nation.

CHAPTER SIXTEEN

The Industry Goes to War

On some distant day when minds have become clearer and men have become calm, historians may write that the automobile industry was the determining factor in the defeat of the Central Powers in the World War.

The war was one of men and machines, men and machines—always, men and machines. The nation supplied the men and the automobile industry, in a large way, supplied the machines—airplanes, trucks, guns, tractors, tanks, ambulances . . . it took a little while because America was so unprepared.

What the Dodges did is one of the fine stories of achievement. You have already viewed these brothers at close range—when they were starting the building of their own product; you have seen them at long range—when they were helping to lift Ford into greatness.

Now see them in war.

One of the pressing needs of the War Department was for recoil mechanisms for the great field guns. These parts were intricate mecha-

nisms, and the government began a search for a manufacturer who could guarantee to furnish 50 such parts daily. It investigated what it considered natural sources. It met with upraised hands and stammering voices:

"Perhaps ten or fifteen a day—but—fifty! It is impossible."

What follows sounds like romancing. It isn't. Government agents came to Detroit. They arrived in the city on Saturday morning, October 27, 1917. They intended calling on different automobile manufacturers and their first visit saved them time. They went to see John and Horace Dodge. Explained their problem. The Dodges listened carefully. Asked questions. Studied blueprints. After minutes of silence, broken only by the tight breathing of the men—for they all realized the danger their nation was in—John Dodge raised his head and his jaw was thrust out as he barked:

"Fifty of those things. Hell! We'll make a hundred of them a day for you."

The government representatives smiled and cautioned:

"Manufacturers who are in the business have told us it is impossible to make more than fifteen a day."

John Dodge snorted: "Go on back to Washington. We'll do as we tell you we'll do."

The officials thanked Dodge for his assurances and explained there were other matters to consider.

"What are they?"

"When can you be ready?"

"By the middle of March."

"'By the middle of March!'" they gasped. "That's only about four months away."

"Well."

Accustomed to quick action, the representatives couldn't quite grasp these men. They moved too fast. Yet . . . they seemed so sure of themselves. They seemed to instill confidence.

"That's wonderful. Now—one more thing. The government will finance this project."

"It will do no such thing. My brother and I are able to build it and pay for it. Now, gentlemen, let's go to work."

Before nightfall the Dodges had been in conference with the department of public works, with the water board, with representatives from the Detroit United Railway, with executives of the Detroit Terminal Railway, with the illuminating and the gas companies.

On Sunday morning dirt was being thrown and rails were being laid into a site owned by the brothers.

"Where did they get the rails so quickly?" Is that the question?

Well, the country was at war. There was a little-used right-of-way nearby. Two circumstances; one conclusion.

On Tuesday the Detroit city council appropriated $40,000 to extend the sewer system to the property and a week later water mains were being installed. In the meantime, steel had been ordered over the long distance telephone and was being rushed to Detroit. While it was in transit, excavators were digging and preparing the way for the foundations.

Within a month from the time they had started, the entire foundation was laid, and steel was rising to enclose a 600x800 structure. Winter closed in and the breath of zero chilled the steel and froze the concrete but there was never a pause—day nor night. Fire pots were kept going and men danced about, warmed themselves, and hurried back to their tools. John and Horace Dodge scarcely slept during those months and they began installing machinery before the roof was on the structure.

The first week in March they wired Washington. The building was ready. Machines were ready. Men were ready.

They turned out the mechanisms in larger quantities than government officials thought pos-

sible. And their financial arrangement with Washington called for a profit of ten per cent on the actual cost. Out of this ten per cent profit the Dodges paid excess profits tax, income tax, and local tax.

The building cost them $1,500,000.

But they had no board of directors and no stockholders other than themselves to consider—and they were content.

During those feverish days of war, George Creel, director of the government's publicity bureau, gave out a press story which thrilled the world—leastways, that part of the world which was fighting Germany.

In breathless language, the propaganda told of the summoning to Washington of aircraft engineers—of midnight sessions with the War Department—of locked doors in the Willard Hotel—of soldiers with fixed bayonets patrolling the corridors—of five days through which engineers worked, eating little but consuming tremendous quantities of coffee or whatever it is engineers consume to keep themselves awake and over their drawing boards . . . of how these wizards of pencil and blueprint went into their chambers unimpeded by even an idea and came out with a full set of plans for the Liberty motor.

Engineers didn't believe any such nonsense but the public swallowed it—grew heartened,

and marveled once more at American efficiency. Crowed over American brains and allowed as how "preparedness was all bosh anyway; we could get into war and our Edisons and Vincents and Fords would manufacture everything overnight."

The facts, however, are somewhat different.

Two years before the participation of this country in the war Colonel J. G. Vincent, vice president in charge of engineering for the Packard Motor Car Co., had started experiments with a new type of airplane motor. He built the engine and Ralph De Palma, a racing driver, tried it out in an automobile. A few records for speed were hung up.

As any engineer knows, improvements in machinery come through progressive stages. Vincent was not satisfied with the motor and he set about building another. It, too, was tried out in an automobile because there were no suitable airplanes for testing purposes.

Vincent was still dissatisfied. He built a third motor. It was tested, day and night, for weeks. It answered all demands put on it, and Vincent reported his findings to Alvan Macauley, president of the Packard Motor Car Co. At a conference held in Mr. Macauley's home on Sunday morning, May 27, 1917, it was decided

to submit the prints and drawings to the War Department.

Further than this, Vincent was empowered to inform the government that the Packard company was prepared to furnish the motors in quantities, through enlisting the aid of other manufacturers.

In Washington Colonel Vincent appeared before officials from the War Department and also met representatives of the French and British forces. E. J. Hall, an engineer who had built engines for the Russian government, was summoned to Washington to meet Colonel Vincent. Then began the five-day conference in the Willard Hotel.

So, you see, there was a conference and soldiers did patrol the halls of the hotel.

Against the advice of Colonel Vincent and over vehement protests from the French and British engineers, the War Department decided to install a splash feed system in the motor, instead of a pressure-feed system, as designed by Vincent. Shortly after manufacturing began they adopted Vincent's recommendations.

Packard's contribution to the Liberty motor did not end with the design. It built the first Liberty motor, the first Liberty motor to fly, and the first Liberty motor ever made by production tools. Up to the signing of the Armistice,

Packard also built more Liberty motors than any other maker.

The greatest contribution of all, however, was the vision which foresaw the need for such a motor. Prior to the appearance of the Liberty, the Packard company had expended more than $400,000 in backing its judgment that a standardized American war engine would be sorely needed and, during the war, it did what many other companies in all fields did—it set aside its private interests that it, too, might help all it could.

Henry Ford, because of his pacifistic utterances, his peace ship, and his general aversion to war, was a much-sought man by the newspapers after the entry of this nation into the conflict. His secretaries kept him well protected from the waiting, fuming, anxious gentlemen of the press.

One day a managing editor summoned a hesitant reporter to his desk. The word "hesitant" is used advisedly because intuition told the reporter what was in the editor's mind.

"From now on until you see him, and get him to talk, you have only one job about this place," advised the czar of the editorial rooms. "See Ford—and don't take too long doing it. That is, if you really want to remain in our sociable organization."

The first point of attack was the Ford plant in Highland Park.

An attendant, sitting on a raised platform in an enormous waiting room, took the name, and vocation, and smiled.

"You're a new one."

"What do you mean?"

He did not answer but looked over the room and grinned a wide grin for all the salesmen of bolts and nuts and screws and washers to share with him. Then he acknowledged:

"I'll tell Mr. Leibold you're waiting."

Office boys rushed in and out—salesmen for bolts and nuts and screws and washers followed them; and the reporter waited. At last the still amused attendant looked over:

"Mr. Leibold will see you now."

E. G. Leibold, general secretary to Henry Ford, was busy with some correspondence when the reporter came in. He glanced up, after a moment, and barked:

"Mr. Ford is not seeing newspapermen."

"Where is Mr. Ford?"

"He is not here."

"Where can I see him?"

"You can't."

"Why?"

"I told you he wasn't seeing newspapermen."

"Are those his instructions to you or your instructions to me?"

The visit ended, right there.

A somewhat discouraged reporter hung around the Highland Park plant most of the day. Along late in the afternoon an idea trickled through the gloom. Ford lived in Dearborn. There was a gatehouse at the entrance to his estate. An hour later futile efforts were being made to coax a gatekeeper into telling whether Ford was expected back through that entrance.

At eight o'clock that night the lone vigil ceased but at six o'clock the following morning it was resumed.

It really wasn't a bad place to wait—if it hadn't been raining. Noon came dragging—early afternoon and what with the unsociableness of a gatekeeper who would leave a newspaperman—a hungry newspaperman—standing in the rain, the chase lost some of its zest.

Mid-afternoon. The reporter turned his empty stomach towards a restaurant. Then he went to the Ford offices in Dearborn. There were so many places this man Ford could be—at Highland Park, at home, at the Rouge plant, at the Dearborn offices . . . a dozen other places.

Four o'clock—four-thirty—five o'clock—five-thirty—five forty-five—six o'clock—

Turning into the little-used side road came a small coupe. It was coming fast. As it bounced across a set of railroad tracks the reporter recognized its occupant. Mr. Ford pulled into the curb, opened the door and cried:

"Who are you waiting for?"

"I'm waiting for you, Mr. Ford."

"You're pretty wet—been waiting long?"

"Quite a while."

"Why didn't you wait inside?"

"Because I thought there was a better chance to see you by staying out here."

The manufacturer looked a bit puzzled but asked no questions. Rather, he shut the door of his car, calling as he did so:

"Go on inside. I'll be there directly."

Within five minutes Ford, accompanied by Charles Sorensen, one of his trusted lieutenants, came to where the reporter was waiting. That interview was one which went around the world—it was an interview in which Ford said:

"Everything I've got is for the government and not a cent of profit."

In 1924 the same reporter was assigned by Norman Hapgood, editor of *Hearst's International* magazine, to see Ford on the subject of war profits. In an interview which was approved by Mr. Ford, these things were said:

"Henry Ford, on the day this article was writ-

TREASURY DEPARTMENT

WASHINGTON

October 24, 1928.

Norman Beasley, Esq.,
Book-Cadillac Hotel,
Detroit, Michigan.

Dear Mr. Beasley:

I have your letter of September 29, 1928, requesting information concerning the war profits reported to have been donated to the United States Government by the Ford Motor Company.

The Treasury records do not show the receipt of any such donation.

Very truly yours,

A. W. Mellon

Secretary of the Treasury

ten, was ready and anxious to sign a check—a check for from $500,000 to $1,000,000—payable to the Government of the United States.

"Ford officials expressed themselves as being at a loss to account for two circumstances, one the announcement that Ford war profits had already been returned to the United States Treasury, the other the announcement that the profits had reached $20,000,000. The origin of both of these items has been searched in vain. The fact is, the public is likely to be disappointed by the amount to be returned.

" 'We are not actuated by the thought that returning our war profits will move others to follow our example. Our thought is this—

" 'We don't want war profits.' "

Late in 1928 the reporter wrote to Andrew W. Mellon, Secretary of the Treasury, requesting an official statement as to whether Ford "war profits" had been returned.

One month after the mailing of the request a reply was received from Mr. Mellon.

It follows:

"I have your letter requesting information concerning the war profits reported to have been donated to the United States Government by the Ford Motor Company.

"The treasury records do not show the receipt of any such donation."

CHAPTER SEVENTEEN

Henry Ford Becomes a Strategist

After the close of the war Lord Curzon declared "it was a victory of Allied motors over German railroads."

One of the largest suppliers of trucks to the Allied forces was The White Company, of Cleveland. And, in 1918, this company, one of the pioneers in the industry, abandoned the passenger-car field. Executives of the organization were agreed that they could not produce trucks and motor cars under the same manufacturing roof. At almost the same time, and for a similar economic reason, Packard closed out its truck business in favor of passenger cars.

It was a curious twist in circumstances that war should cause White to quit building motor cars, for it was in field maneuverings in preparation for war that the product first attracted attention from army officers. In 1904 Walter C. White drove a steam car to Manassas, Virginia. Two other White cars followed and the three automobiles were the only machines in the camp of General H. C. Corbin, in command of the field maneuvers.

General Corbin invited Mr. White to the officers' mess and White, in turn, invited General Corbin to go for a ride. At the conclusion of the encampment General Corbin wrote a letter of appreciation to the company and a report to the War Department on the advantages of motor equipment for army use. It was one of the first times—if not actually the first—that the automobile was officially recognized by American army officers as a useful implement in war.

In 1906 White and Bert Dingle, a racing driver, arrived in San Francisco after the earthquake. Their car was immediately assigned to Red Cross work and at the first stop the Red Cross chief turned to a corporal, who was serving as a military aide, and barked:

"Corporal, I've had half a dozen cars and every one of them has run away from me as soon as I turned my back. If those fellows attempt to leave, shoot them—understand, shoot them!"

In 1907 this company sounded one of the first warnings against "orphan cars." In its advertisement it stated:

"In a reserved and guarded way we have several times spoken of the desirability of purchasing a care made by a substantial firm possessing ample capital. In the last few months many concerns which have embarked in the manufacture of automobiles have discontinued, while

others have withdrawn from actual business and their organizations have been scattered.

"The man who has bought a car from such a concern learns too late that he has a car on his hands which is the next best thing to useless and worthless simply because duplicate parts cannot be obtained. It is of utmost importance that the purchaser should inquire very thoroughly into the stability of the concern from which he buys and that the offer of a car at a 'special price' is apt to be an incident of a 'closing out' sale."

Through succeeding years and in numerous army encampments White cars were staff cars. They first went to war when, in 1913, they were sent with an army to quell disturbances in Haiti and San Domingo. In 1914 they were used in the trouble along the Mexican border and it was here that the passenger cars began to be superseded by trucks. For the White car it was the beginning of the end—although the end was four years away.

The war also caused Ford to bring out his tractor when he did. He had not planned going into production before 1918, at the earliest, but the raiding German submarines were shutting up Great Britain. Starvation was threatened and Ford received an urgent message from English officials to the effect that "need for food production in England is imperative and large quantity

of tractors must be available at earliest possible date for purpose of breaking up existing grass land and ploughing for fall wheat."

Charles Sorensen was sent to England and he entered into a contract with Lord Milner to furnish 5,000 tractors at $700 each.

"How long will it take you to deliver them?" asked Milner.

"We will start shipping in sixty days," promised Sorensen.

The price Ford agreed to was less than half of what British administrators had been paying. Following the war England's government expressed its appreciation to the manufacturer, telling him the delivery of the tractors had much to do with breaking the throttling grip of enemy hands.

During this period—or in 1917—Ford was busy defending himself against a suit brought by the Dodge brothers. One day, approximately three years before, Ford, accompanied by some of his engineers, had surveyed a tract of property on the Rouge River, below Detroit. Walking out into the marsh land, Ford had put down his heel and declared:

"Right here. This is where we will build the plant. Midway between coal and ore—it is the best place for a blast furnace."

A few days later the newspapers were noti-

fied and in an interview Ford declared he intended spending $100,000,000 on the industrial development. Blast furnaces were to be built, foundries, glass factories—and other plants pertaining to the manufacturing of automobiles. It was the beginning of the greatest single industrial development in the history of the industry and, perhaps, in the history of the world. Talking with one of the writers at the time, Ford said:

"The tail of the Ford industrial will be at the Rouge; the head will be at Dearborn."

The distance between the two points was about five miles.

While newsboys were still shouting the news, Ford received a telephone call from John Dodge.

"I'd like to see you," said Dodge.

"All right."

"Come on over to the Dodge plant. You've never been here and we can show you the plant and talk at the same time."

That afternoon Ford, accompanied by C. Harold Wills of his own organization, went to call on the Dodges. During their conversation, John Dodge led around to what was in his mind by remarking:

"I was sorry to learn about the resignation of Couzens. He was a good man. His loss will be a detriment to the company."

Ford disagreed. Stated, very emphatically, that it was a good thing for the company that Couzens had quit. "Now we will be able to go ahead and do things," he declared.

"What do you propose doing?"

"Doubling the size of the Highland Park plant—doubling the output—cutting the price of the cars in half."

"If you're going to do that," objected Dodge, "you can have my stock, as well as the stock owned by my brother. As a matter of fact, you should buy out all the minority stockholders."

"Why?"

"Then you can run the business as you see fit."

"I don't care to buy any more stock. I have control and that is all that is needed."

The Dodges, disturbed in their minds, made no further comment as Ford and Wills got up to leave a few minutes later.

It is entirely possible Ford had another purpose in his expansion program. That was the purpose of bringing on himself stockholders' suits—with the ultimate result of buying out the stockholders in case the suits should be lost. This, in spite of his denial to John Dodge, and in spite of later utterances. Checking over his books, he was mindful of the fact that, each year, nearly half of his profits were being turned over to persons no longer in the management of the

business. He wanted those profits that he might expand.

Accordingly, on August 31, 1916, he announced that, henceforth, the bulk of the earnings would be reinvested in the business. He stipulated he would pay dividends not to exceed five per cent a month on the $2,000,000 capitalization of the company. This meant a distribution of $1,200,000, in dividends every twelve months and of that amount Ford would get back $702,000. The earnings of the company were far, far in excess of that.

John and Horace Dodge, having invested their money in the beginning, were of the opinion they had a full right to their proportionate shares of all earnings. Owners of ten per cent of the stock, they brought suit to compel the distribution of accumulated earnings held in cash and all future earnings.

Ford, in his answer, admitted the allegation of facts in regard to the company's expansion program, as well as its profits, but denied all the equities in the bill of complaint. On December 9, 1916, the plaintiffs secured an injunction enjoining the Ford Motor Company from further expenditures on its expansion program. Ford appealed to the Michigan Supreme Court and was given an alternative order of mandamus against the circuit court judges, ordering the dis-

solution of the injunction and the substitution of a bond for $10,000,000 to protect the Dodges against loss.

Hearing of the suit was conducted in the circuit court. Rapidly it developed into a bitter, sarcastic courtroom row. Elliott G. Stevenson, attorney for the Dodges, kept Ford in the witness chair through several days raking him with questions. His search was caustic; his findings acrid.

At one point in the examination he was questioning Ford on a land purchase (not the Rouge property) and received this answer:

"I think it is for the best interests of the motor company to take it at the present time."

"Some of the motor company don't think it is."

"Well—"

Alfred Lucking, of Ford's counsel, interposed a remark to this effect:

"Somebody has got to be in control of these things. It is a question of whether the tail wags the dog, or the dog wags the tail, isn't it?"

"The dog seems to be wagging you principally, or there wouldn't be so many interruptions," roared Stevenson, glaring at Lucking.

Ford, from the witness chair, leaned forward and snapped:

"If you sit there until you are petrified, I

wouldn't buy Dodge Brothers' stock, if that is what you are talking about."

"Did I ask you anything about that?"

"No, but that is what you are talking for, and nothing else."

"No, I haven't. I am not talking about that at all."

"Yes, you are. Dodge Brothers got me over there in January, or February, and told me the only thing I could do is to buy their stock."

"Now, Mr. Ford, you have referred to that before. They called you over there to talk with you about the Ford company, didn't they? They said they wanted to see you, and were going to see you?"

"They talked with me about nothing else—"

"Just a minute—"

"Nothing else but buying stock."

Ford lost the suit. On December 5, 1917, a decision was rendered ordering him to pay $29,500,000, less all dividends during the pending of the suit, leaving $19,275,385.96 to be distributed as a special dividend. An appeal was taken to the Michigan Supreme Court and it rendered a decision sustaining the decree of the circuit court that the dividend should be paid. This decision was announced on February 9, 1919.

Now, in order to understand Ford a little bet-

ter we have to leave him—while he is reading this decision from the State Supreme Court.

Two years previous—or, on February 2, 1916—he had requested from his board of directors that he be given all claims to the Ford tractor and be permitted to use the name of "Ford," providing he put "Henry" in front of it. In addition, the directors agreed that if the Ford Motor Company later decided to go into the manufacturing of a tractor it should be permitted to do so on payment, to Henry Ford for money he had spent in experimental work, the sum of $46,810.

Ford, announcing his expansion program at the Rouge, knew he was certain to encounter opposition. He was starting to lay his lines when contemplating that move. He was beginning to loop those lines about his minority shareholders when he secured permission to manufacture a tractor under his own name.

While hearings on the Dodge suit were still being reviewed by the courts, he organized a separate corporation. It was called Henry Ford & Son and had for its purpose the manufacturing of a tractor. The capitalization was $1,000,000 and he announced an intention of taking advantage of the resolution of the directorate. Some of his associates began to be alarmed.

He permitted them to recover some of their

equanimity and then, on December 31, 1918, dropped a whole trainload of dynamite by announcing his resignation from the presidency of the Ford Motor Company. In his brief statement he declared he "wished to be relieved of all responsibilities and obligations arising from holding a salaried office in the company."

He elevated his son Edsel, scarcely twenty-five years old, to the presidency and then went to California.

Returning from California, Ford gave out an interview that turned the chuckles of those who were profiting by the court decision compelling the payment of dividends, in full. Turned the chuckles into loud lamentations.

In his published statements Ford declared an intention of organizing a new automobile company and manufacturing a car of low price. "I will build the car in a factory of my own," he said. "The factory will be located in Detroit."

That interview was widely published, as Ford expected it would be. The minority stockholders—that is, most of them—were now thoroughly frightened. They appreciated the value in the name of "Ford" but weren't at all sure the name would be worth much with the actual personality out of the enterprise. They conferred among themselves. Discussed selling. Whisperings of their conferences were carried to Henry Ford

and he made no comment. But, he was pleased. There had been other occasions in the history of the company when he had whipped recalcitrants into line by threatening to sell.

What these minority stockholders didn't realize was—

This naïve inventor of other years had grown into a strategist.

Quietly, and with no declarations of his intentions, Ford set about to acquire all the outstanding stock. Two holding companies were organized. One was Henry Ford & Son, Inc., of New York, and all stock in the Ford Motor Company, excepting qualifying directors' shares, was transferred to it. The other company was named the Eastern Holding Company and it was incorporated in Delaware. It purpose was to deal in investments. Leastways, that was its expressed purpose, at the time. Six days after incorporation its name was changed to the Ford Motor Company and its authorized capital stock was increased from $100,000 to $100,000,000.

The Old Colony Trust Co., of Boston, the Chase National Bank of New York City, and a syndicate composed of Bond & Goodwin, also of New York, perfected arrangements with the Delaware corporation for a loan of $75,000,000. The money, however, was not to be borrowed un-

less the stock transfer were completed. Thereby, saving interest. It was to be a one-year credit.

With this much accomplished the minority stockholders were approached by well-groomed, ready-worded emissaries—emissaries who were strangers to all. Propositions were made. Counter propositions were considered. The fact that Ford had announced his intention of starting a new manufacturing company was not mislaid, in any of the discussions.

Just one of the minority stockholders was really suspicious as to the hidden identity of the real purchaser. That suspicious, hard-to-scare person was James Couzens. Having been so close to Ford for so many years, Couzens bluntly told his visitors that he had no intention of selling. They argued with him. He refused to listen. Referred to the fact that he was busy and had no time for useless conversation.

In the meantime, however, other strangers had been making progress with the Grays, Horace H. Rackham, and John W. Anderson. The Dodges had been approached and, following their custom of years in such matters, they telephoned their attorney, Howard B. Bloomer.

"General Motors is buying out Ford," said John Dodge.

"What do you mean?"

"Horace and I have received offers for our stock in the Ford Motor Company."

"What makes you think General Motors is buying?"

"Well, Durant is back in control and Ford has already announced an intention of starting a new plant and building another car."

"Don't be fooled, John."

" 'Don't be fooled?' "

"That's what I mean. Ford has control now and he won't sell, no matter what he says about starting another company. Furthermore, there is no reason for Durant wanting a minority interest in the Ford Motor Company."

"I never thought of that angle," agreed Dodge. "We'll take a chance you are right. I'll sell. So will Horace."

They did, the following day. Rackham, Anderson, and the heirs to John S. Gray fell in line. Unless Couzens could be persuaded to sell the whole transaction would flatten out because Ford had stipulated it had to be a clean sweep.

Couzens was no less impatient than he formerly had been. He did, however, say:

"I'll sell out—but on one condition."

"What is it?"

"You must tell me the name of the buyer."

At the end of the pipe line Ford was informed of their difficulties. Knowing the stubbornness

of his former associate, he called off his scouts and went, in person. Personally closed the transaction.

In selling, the Dodges received $25,000,000; the heirs to John S. Gray received $26,250,000; John W. Anderson and Horace H. Rackham each received $12,500,000. Couzens participated to the extent of $29,308,858 while his sister, now Mrs. A. P. Hauss, received $260,000.

Their original investments were:

James Couzens	$ 2,400
Rosetta Couzens	100
John W. Anderson	5,000
Horace H. Rackham	5,000
John Dodge	5,000
Horace E. Dodge	5,000
John S. Gray	10,500

In dividends, over the years, the distributions had been:

John Dodge	$ 4,935,750
Horace E. Dodge	4,935,750
H. H. Rackham	4,935,750
John W. Anderson	4,935,750
John S. Gray Estate	10,355,075

Their investments had turned out well. Henry Ford, considering the magnitude of his business, had done well, too. For the first time, since its beginnings, he was free to do as he

wished with no responsibilities to anyone other than himself.

His first big responsibility to himself was not far away—just off a few months, for 1920 was beckoning.

CHAPTER EIGHTEEN

When Three Giants Skidded

For hours scarcely a word had passed between them. Now they were half-standing and half-leaning against a desk—across the top of which charts had been spread.

These two men contrasted sharply. The older one—powerfully built, his face and hands tanned an even darker brown than the natural coloring inherited from his Spanish mother, his dark, curly hair wet against his forehead, and his black eyes showing the depths of worry into which his mind had been plunged, made some rapid pencilings on a sheet of paper and exclaimed:

"By the middle of September!"

His companion—a slight, boyish figure, skin fair, and eyes a bluish-gray, lifted the paper on which notations had been penciled and nervously protested:

"We must have made a mistake somewhere."

For a moment the older man's face lighted. For a moment—that was all. "There has been no mistake," he cried. "I have checked and rechecked and checked again. We are right. The

dividing line is September and probably not later than the fifteenth of the month."

"We will show these charts and our findings to my father—today," quietly declared the younger man. "We had better go, now."

Edsel Ford, president of the Ford Motor Company, turned to Frank L. Klingensmith, vice president and treasurer of the company, and forced a smile.

"What do you suppose he will say?"

"What can he say?" returned Klingensmith. "We are giving him the facts. We can only recommend that production be cut to meet the demand. With falling sales, production must be lowered, too. As that master chart will show, the curve of production will meet the sales curve about the middle of September. The thing to do is to cut production now—and keep cutting it until sales start coming back. To recommend that we give our men four days' work, a week, so as to keep our organization intact."

"That's just what we said in the summary of our findings," observed Edsel Ford.

"What else was there to say?"

Not long afterwards the two men, accompanied by W. S. Knudsen, production manager, and one or two others, were with Henry Ford in his Dearborn home. They wasted no time in disclosing the purpose of their visit. Ford

listened carefully, examined the charts, and declared:

"Instead of cutting production, as you recommend, we will increase it and lower the price of the car."

"Do what!" exclaimed Klingensmith.

Henry Ford repeated his decision, and a note of crabbedness crept into his voice.

"We are already selling close to cost," protested Klingensmith.

Knudsen interposed a suggestion:

"Why not make a fifty-dollar cut now, Mr. Ford? That will bring us down to cost but perhaps we can get back some of it by forcing additional economies in the plant. Later, we can make another fifty-dollar cut if, in the meantime, we are able to influence our suppliers into reducing the price of raw materials."

Ford was silent. His mind, apparently, was wrapping itself about the suggestion pertaining to the suppliers, for he finally said:

"No. We'll make a cut of one hundred dollars. We'll make it at once. We'll go after the suppliers right away, too."

The reduction was announced and Ford, Knudsen, and other executives of the company started out to visit the steel mills. In Pittsburgh the president of one company had been warned of their mission. He had them escorted through

his plant on the subterfuge of an inspection tour while he quietly made a getaway. They got no reduction here but they did enforce their demands in other places.

Largely, it was Knudsen's job to save eighty dollars in the manufacturing costs in each car. He did bring about savings of thirty-six dollars in raw materials and was beginning to develop further economies within the plant when the law of supply and demand caught up with him. The intensive research Edsel Ford and Klingensmith had made into the purchasing power of the country bore out. In November the Ford plants shut down. The weeks lengthened. Three—four—six . . . and rumors began to flood the country that Ford was in financial difficulties.

The rumors were strengthened by the announcement of the resignation of Frank L. Klingensmith as vice president and treasurer of the Ford Motor Company on January 4, 1921.

Ford needed money—a lot of money.

Of the amount he had borrowed to buy out the minority stockholders there remained $33,000,000 to be paid. The government would soon be collecting $18,000,000 due for income taxes and a bonus of $7,000,000 to the organization would also have to be paid, pretty soon. These obligations totaled $58,000,000 and the company had $20,000,000 in the banks.

The shut-down was to react to his benefit. Lasting through more than three months, it enabled his dealers to work off their surplus stocks so they were beginning to need merchandise.

In this situation Ford began cracking the whip. He began lashing back into shape an industrial giant that had grown fat and loggy from too much prosperity. Everything in the plant that did not contribute to the manufacturing of the Ford car was thrown out. Everything—that included men and materials. The office force was reduced by half and those who did not accept offers to go to work in the shops were dismissed. Scores of foremen were reduced to working on machines.

Parts and finished cars were shipped to dealers and they had to accept, and pay for, under the quota arrangement with the factory. So, instead of borrowing money himself, Ford compelled his dealers to borrow, as many had to do to keep their franchises. He needed more funds. He applied more pressure to his manufacturing methods. Increased the turnover in raw materials so they were in his hands one-third the time they formerly had been; speeded up production so the cycle of manufacturing was reduced from 22 to 14 days.

On April 1, 1921, a few months after he had begun sweeping out the waste, the financial posi-

tion of the company had changed from a bank balance of $20,000,000 to a balance of $87,300,-000—far more than was needed to meet the obligations.

The years of 1920 and 1921 were bleak ones in the industry. The business sagacity of one man was all that averted what easily might have been a disaster in the Ford Motor Company. Another romantic figure of the industry was not to be so fortunate.

In the summer of 1920 General Motors began reeling in distress. Unlike the Ford Motor Company, with one man owning, or controlling, all the stock, General Motors' shareholders were widely scattered across the country. Rumors began riding the financial winds out of Wall Street. All was not well with Durant and his colossus. Inside the organization it was known that sales had fallen off, alarmingly.

Shares of General Motors stock began to be offered in the market. A trickle, at first—then, a deluge. The market broke at 40, and at 30 Durant organized a buying syndicate. Alive to his danger he bought, and he bought, and he bought. Thousands upon thousands of shares—tens of thousands of shares.

His desk, littered with telephones, was a central office for half a hundred brokerage concerns. Durant, sitting there, snatched first one tele-

phone and then another—left receivers off their hooks while he shouted orders that all might hear. He guaranteed losses, so it has been said, and when heavy selling orders dropped the stock to 20 he formed another syndicate, opened more brokerage accounts and continued to buy—buy—buy.

From every direction orders poured in on him. Desperately he threw up a levee of dollars, seemed to have stemmed the flood, and, then, with sinking heart, saw it smash down his fortifications and carry the stock to . . . 18.

Down—down—down . . . to 17 . . . to 16 . . . . to 14 . . . . . to 13 . . . . . to 12.

Durant, mute now, still sat at his desk. His telephones, one by one, grew silent.

Millions upon millions that had been his had been carried out—far out—far beyond his reach; millions he had borrowed from his friends were now tossing—little more than debris on the turbulent stream. At almost sixty years of age Durant was millions of dollars in debt. Money, the thing he had played with, and toyed with, had rolled over him and, for the moment, engulfed him.

On December 1, 1920, he walked into the General Motors offices. He walked in there to tender his resignation as president. Still smiling, still kindly, still casual, he sat down at his desk, at-

tended to a few details, took a last look around the familiar room, and stepped out, softly closing the door behind him.

As he passed down the corridor, he paused to shake hands with old associates and with the smile still playing about his lips, he murmured:

"Well, May first is usually the national moving day but we seem to have changed it into December first."

A nod and he was gone.

In the seclusion of their own offices, where no one could see, there were General Motors executives who wept, that afternoon.

Taking stock of themselves, the principal stockholders found it necessary to go to banking friends for loans aggregating $80,000,000. Pierre S. du Pont was elected president and Alfred P. Sloan, Jr., was chosen for the office of executive vice president.

Under the management of these men General Motors slowly righted itself.

But the industry was to hear more of Durant. Undismayed, Durant again took up the task of gathering to himself the friendships of men—and the money these friendships represented. Not many months were to elapse before he was to announce the Durant Motors and to sell stock to more than 250,000 subscribers. Such was the magic of his name.

The Willys-Overland company was another of the giant ships of industry that was soon in the grip of the treacherous currents.

Almost without warning, huge deficits tore through the structure and ripped a tremendous hole in the bottom. Willys dropped the oars and started bailing—with his ship of industry continuously threatening to sink or impale itself on the reefs. It seemed certain it would do one or the other.

Willys, despairing and with hope almost gone, sent up distress signals. Bankers threw him a line in January, 1921. Sparring for time, Willys listened to proposals, made counter proposals, debated on clauses in proposed agreements, and kept the financiers without an answer for months. In the meantime, sales had fallen off because of rumors that the company was going under—that it could not possibly pull out—that it was but a question of days or, at the most, weeks, before its doors would be closed by the bankruptcy courts . . . and would not be reopened.

Through October Willys continued to play for time. Played for time and threw a portion of his energies into selling. The effect of his efforts began to be felt. Through November—through December—into January. All the while sales were slowly improving. In February the bank-

ing committee refused to be put off any longer; insisted that Willys refinance the company in some manner that their obligations might be paid.

In this crisis Willys played his last card. Throughout the negotiations he had talked with local financial men and had convinced them that the company should be given an opportunity to again become prosperous—for the sake of Toledo. His plea of pride took effect. He arranged for the election of four Toledo capitalists to the directorate and sold the idea to his creditors. But, he didn't sell it easily. Nor, did he expect he would. But over the years, from the day he had pulled the Overland company out of the mire in Indianapolis, he had lost none of his persuasiveness.

They tried to beat him down—he wouldn't be beaten down. They swore. He smiled. They called him names. He didn't hear them. Finally they agreed to an extension of their loans to December 1, 1923, and added that "not a day longer would they give." That was satisfactory to Willys. December 1, 1923, was eighteen months away. A lot could happen in eighteen months. Willys intended a lot would happen.

Walter P. Chrysler, having recently resigned from General Motors, was called in to put the plan in order. He did—and it didn't take long.

He sold off all unnecessary property, converting it into cash. The new board of directors turned slow accounts receivable into cash. Willys went on the road. For weeks he did all his sleeping on railroad trains. The strain was terrific but by July, 1922, he had the factory filled with orders and running to capacity.

The extended bank loans of $17,357,500 were met and by the end of 1923 the books of the company had changed from a deficit of approximately $20,000,000 in 1921 to a cash balance of $13,034,032, with no bank indebtedness.

Willys, once again, had demonstrated his right to live in this intensely competitive industry.

CHAPTER NINETEEN

"Be Good to Him to the End"

So closely had they lived their lives that it seemed altogether fitting they should go—within a few months of each other.

John and Horace Dodge.

Attending the automobile show in New York City in January, 1920, Horace Dodge was taken ill. Pneumonia soon developed. The doctors, among themselves, shook their heads—told newspapermen "there is little hope" and then "there is no hope." John Dodge, forgetting all else, remained in the sick room, day and night, night and day . . . only stepping outside to beg the doctors for encouragement—and his agony was such they could not do otherwise—to softly close the door again, and hold his brother's hand, to whisper:

"You're coming fine, Horace. The doctors say so."

Against Death they fought, together. Weakening in the invisible crusher, Horace Dodge drew strength from the courageous man sitting beside him—holding his hand—putting a strong

arm behind his shoulders, lifting him gently and helping him to breathe—whispering, all the while whispering:

"I'm here, Horace. It's John. Keep fighting. Keep fighting."

By his courage, John Dodge brought his brother back—slowly—slowly—surely.

Then—they helped John Dodge to another room, took his clothes off him and turned down the covers. His head fell against the pillow and they lifted his tortured body into the bed. He tried to rest. Did sleep, a little. But pneumonia, from which his brother, in an adjoining room, was recovering, had marked him . . . a few days more and a book—*Lorna Doone*—he had been reading dropped from his fingers—he was gone.

As surely as man ever gave his life for another, John Dodge gave his that Horace Dodge might live.

Just a word ere you go, old friend,
Just a word ere the oarsmen bend,
And your boat speeds out on the unknown sea,
Whose nether shore is eternity.

Turn once more, dear grizzled head,
Before the last faint light has fled,
Turn, and give us the brave old smile,
That warmed and nourished our hearts erstwhile.

The night is closing, our eyes are wet,
But see! There's time for a signal yet—
Quick! Ere thy bark hath left the sand,
Give us a wave of your cheery hand.

And hark to our answer winging back,
Far o'er the waters cold and black,
Straight to the foot of the great white throne
Where the Master waits to greet His own: —

Christ! Be good to him to the end
For he was a friend—a friend—a friend.

Through the months that followed Horace Dodge was a lonely, lonely man. He tried, pathetically, to throw himself into the business. There were too many memories. In December, smiling faintly, he closed his eyes.

CHAPTER TWENTY

Ingenuous Enough to Believe in Honesty

On January 11, 1921, Frederick J. Haynes—who, as a young man, had refused an offer of $2,500 a year to join the Ford Motor Company because he didn't think it could afford to pay him such a salary—was elected to the presidency and general managership of Dodge Brothers.

The announcement was made at the automobile show in New York, just a year following the death of John Dodge and a few weeks after the passing of Horace Dodge. Through succeeding years the management tried to follow the rules and regulations of the business as laid down by the dead brothers. For a time they succeeded. They were managing the business in behalf of the Dodge widows who, according to the wills of their husbands, were equal partners in the great enterprise.

Growing up with the organization—but still outside of it—were three brothers. The Graham brothers. Joseph B., Robert C., and Ray A. Graham. For just a moment there will seem to be digression . . . but, the story will lead back:

When three young men accumulate as many millions in money as they have fingers on both hands, the fact is popularly supposed to justify a general elevation of eyebrows.

The surprise and admiration are intensified when it is learned that the boyhood habitat of the deserving young men was no less a place than, and so less a place as Evansville, Indiana. The real piquancy of the tale only begins to reveal itself, however, when the further fact is educed that they got their start in as clean and decent and wholesome a business as all farm dairies ought to be.

Unlike most success stories, this success story actually has a point and a moral, as well as an existing and continuing significance. It is, they confess themselves, inspired from the outset by the principles which they saw ascribed to John and Horace Dodge. They confess further that they were ingenuous enough to believe in the reliability of their homely principles of honesty as foundation stones for a building of a business career.

They dreamed that they were, above everything else, eminently practical and capable of daily application, but in the early days they never dreamed that their earnest acceptance of the Dodge idea would ultimate in their personal

direction of the Dodge business. That is precisely what happened.

The Dodge widows, with changing business conditions and diminishing grief over the death of their husbands, lost interest in their heritage. In 1924 they decided to sell, providing they could obtain an adequate cash price. They listened to various propositions and finally sifted out two offers:

One from General Motors for $134,000,000.

One from Dillon, Read & Company for $152,000,000, all in cash, minus dividends since January 1.

The Dillon offer was accepted. On May 1, 1925, the widows were given a check for $146,000,000.

With the transfer of the stock the Grahams were put in charge of the business. After a three months' suzerainty in which the company recorded one of the most spectacular recoveries the automobile business had ever known, the three brothers stepped out. At the time of his retirement Ray Graham was credited with having become the largest individual stockholder in the company. By association with Dodge Brothers distributors he and his brothers had built up the Graham Brothers Truck Company to the point that insured a profit return of $8,000,000 a year.

In point of earnings Graham Brothers promised, in due time, to excel Dodge Brothers. The young farmers from Indiana had become the largest manufacturers of trucks in the world. When they retired from Dodge Brothers, Ray Graham and his brothers, under the terms of a year-old option, sold the ownership of Graham Brothers Truck Company to the new owners of Dodge Brothers.

To succeed Ray Graham, Dillon, Read & Company installed Edward G. Wilmer. Wilmer had just finished the job of reorganizing the Goodyear Rubber Co., and without previous automobile experience—that is, of course, in the management of such a business—was given the task of succeeding a man of unusual manufacturing experience. Discouragement overtook him. Within three years the management and ownership again passed along—to Walter P. Chrysler.

In those same years another young man, E. L. Cord, new to the industry, was changing the affairs, and the outlook, of one of the oldest companies. Founded in 1874, the Elkhart Carriage Company was, for years, one of the best-known vehicle manufacturers in the country. In 1900 the owners of the concern became interested in automobiles. They organized the Auburn Automobile Co., with Charles Eckhart as president,

and Morris Eckhart as vice president and general manager. The capital invested was $2,500, and the product was a one-cylinder car. The Echharts continued in charge of the business until June, 1919, when they sold it to a group of Chicago bankers.

In 1924 Cord, scarcely thirty years old and a young man who had received much of his experience selling used cars, went to La Salle Street bankers and outlined opinions he had regarding the Auburn company. They listened because they were not entirely happy over their purchase. But, they were skeptical.

"The automobile industry is narrowing down to three or four big concerns," they said. "A well-known manufacturer might be able to put Auburn across but—well, you're pretty young and you're not known."

"Let me try," pleaded Cord.

"On what basis?"

"I'll go to the factory, study it, and make a report. You will be under no obligations to accept it nor will you be under financial responsibilities to me."

A day or so later Cord dropped off a train in Auburn, Indiana, and without introducing himself, started in at the back end of the factory and worked up through. He studied factory facilities, inventory methods, expansion possibilities,

personnel—everything; and then returned to La Salle Street, in Chicago, with his report.

He was put in charge of the company. In 1924 Auburn showed a financial loss of close to $70,000; three years later Cord turned in a profit of more than $1,000,000 and had reached out to gain control of The Lycoming Company, Duesenberg, Inc., The Limousine Body Co., and a half dozen allied and parts companies. The combined capitalization was $25,000,000.

Without manufacturing experience Cord did well.

Another man, with manufacturing experience —that is, in the financial end of a great business—was to fail.

A day, or two, after his resignation from the Ford Motor Company Frank L. Klingensmith received a caller. He was O. J. Mulford. Late in 1920 Mulford had organized the Gray Motor Car Company. He wanted Klingensmith's financial experience and he got it. They started manufacturing a small car to compete with Ford. Politically, so to speak, it was out to take advantage of widespread resentment among Ford dealers because of the drastic action in compelling them to accept, and pay for, shipments of cars and parts.

There was manufacturing, financial, sales, and advertising experience in the organization—

also, there soon developed strong differences in opinions as to the management of the business. Mulford, apprehensive of disaster, revived an interest William C. Durant had expressed in the car. With Durant he worked out a plan of purchase. He submitted the offer to his associates and they refused it. They thought they still had a great opportunity to win.

But, the divisions in opinions could have but one end—and that was the end of the company.

C. Harold Wills, another who called the Ford Motor Company his alma mater, formed the Wills Ste. Claire company in 1919. Wills built a manufacturing plant at Marysville, a crossroads some fifty miles north of Detroit. It was to be an ideal home community where the workers could have freedom of movement, gardens, and fresh air. A bit Utopian, and it didn't work out. It wasn't long before the company was in financial distress and from there the step to the bankruptcy courts was a short one.

While Wills and Klingensmith were failing in their manufacturing ventures, another Ford graduate, William S. Knudsen, was causing great embarrassment to his former employer. Resigning from the Ford Motor Company, Knudsen went to Ireland & Matthews. While here he was approached by Klingensmith with a proposition to join Gray. He declined. Shortly

afterwards he received word that an executive of General Motors would be interested in talking with him.

Knudsen heeded the call. Talked. At the conclusion of the interview he was asked:

"What salary do you want to come with General Motors?"

Knudsen smiled. He had been getting $50,000 a year from Ford but, at the moment, the size of a pay check did not interest him.

"Salary makes no difference," he replied. "I'll take the job and you can do your own figuring as to what I am worth."

Under that arrangement he started to work. He became president of the Chevrolet division and within a half dozen years was to accomplish the impossible—

To take production and sales leadership from the man who had been unchallenged for nearly twenty years.

Was to compel Ford to discard his Model T and bring out the Model A. This is not to say, of course, that Ford wouldn't have changed his model, at some time in the future, but there were no signs that he intended to change it so soon. Knudsen was the man who, as an engineer, built the first of the submarine chasers the Ford Motor Company turned out during the war. He built

the ship, complete, in one of Ford's plants—miles from water.

Of Danish blood, he came to the United States when in his twenties. His method of working is best illustrated by a story he tells on himself:

"I was coming down the gangplank from the ship. Everything was strange to me in this new country and I loitered—staring in astonishment at the activity. But I didn't loiter long. A voice behind me yelled:

" 'Hurry up, you blankety, blank, blank. Get a move on you'—and that is what I have been doing ever since."

Knudsen, in view of his record with General Motors, was Ford's greatest mistake in the releasing of men.

About the time Knudsen joined Chevrolet, Pierre S. du Pont became chairman of the board of General Motors, and Alfred P. Sloan, Jr., became president. It was a happy choice. General Motors was still suffering from disorganization and needed a man of Sloan's vision, diplomacy, and understanding to bring teamwork out of what almost amounted to disorganization.

He did it by a simple formula. He distributed responsibility. Put no shackles of orders on his subordinates and said, only, that he expected them to operate in their jobs as though managing their own businesses. A few months

were required before this new doctrine could permeate the organization but when it did quarreling ceased—abruptly. General Motors got under way and spread itself across the world.

After the resignation of Durant, du Pont and Sloan had a great many problems, other than the problem of personnel, to consider.

One of the dead issues they had inherited was the Samson tractor. In 1917, General Motors, following the lead of Ford, had gone into the manufacturing of a farm tractor. The announced price was $650. It was discovered the implement could not be profitably built to sell at any such figure—so the price was raised. An additional discovery was then made—the product could not be sold in competition with tractors of lower price.

In October, 1920, those in responsible positions in General Motors gave weary sighs and closed out that end of their business. They figured their losses at $33,000,000 and softly retired from another headstone in their dotted graveyard.

The Grahams, out of Dodge Brothers, were not content to stand aside and spend profits an industry had awarded them. Back in Evansville, Indiana, they planned their next move. It came, with startling suddenness. One morning Detroit awakened to the news that the Grahams

had purchased the Paige Motor Car Co., one of the oldest in the industry and a concern that, for several years, had been limping and steadily falling behind.

The Grahams were unconcerned over predictions of failure and in their first year made records for Paige production. There was still romance in an industry that had seemed to have become surfeited with it.

And—

One of the most dramatic of all moves remained to be made:

The purchase of Dodge Brothers by Walter P. Chrysler—now about to shoulder his way through the ranks of the giants.

CHAPTER TWENTY-ONE

A Name, Little Known Without—Famous Within

THE writer of these particular pages happens to have been rather intimately associated with Walter P. Chrysler as well as with some of the other noteworthy figures who register their brief appearance between the covers of this book.

Out of a conglomerate mass of impressions, he recalls of Walter Chrysler two distinct impressions. One is that Mr. Chrysler resolutely refuses to live up to the plans and specifications usually provided by the publicist for the definition of the industrial giant. The industrial giant ordinarily looms so large in his own appraisal or in the portrayal of the publicist that lesser figures who may contribute to his success are quite wiped out of the picture.

Walter Chrysler is saved from this absurdity in all likelihood by two pleasant traits—a sense of humor and a sense of justice. If anyone suggested to him that he looked down the corridors of time a few years ago and saw himself emerging step by step out of a railroad into the great

Buick factory at Flint; out of that factory into a position of high command with General Motors; out of this exalted station into Overland; out of Overland into Maxwell and out of Maxwell into Chrysler, and the tremendous success attendant thereon—Mr. Chrysler would probably laugh uproariously.

If you intimated to him that his own unaided and God-given genius had accomplished all of these achievements he would belabor you with a list of the names of men to whom he honestly feels himself heavily beholden. He would not hesitate to say that there was a time in the affairs of Maxwell before the Chrysler was born when he felt that he had carried the task of rehabilitation as far as he cared to do and that he was ready to retire from the Maxwell picture. He would cheerfully admit that he agreed to carry on largely because he was pursued across the ocean and back again by representatives of the Maxwell interests anxious to have him continue.

He will tell you bluntly that this was an accident of circumstance and that when he did, upon his return to America, agree to take up the burden for five years more it was with a certain degree of reluctance.

It is at this juncture that he will begin to drag in some of the names which he considers

collateral to his success. The first name will probably be the name of Frederick Zeder and immediately thereafter the names of Carl Breer and Owen R. Skelton, who were associated in an engineering firm called Zeder, Breer & Skelton.

The appearance of these names on these pages is adequately warranted. Metaphorically speaking, the trio of engineers had been carrying at least the genesis of the Chrysler Motor car around in their vest-pockets for many, many weary months. Chrysler entered and exited from Overland and entered and almost exited from Maxwell, and the car conception cherished by The Three Musketeers of engineering seemed destined never to attain the advantage of Chrysler parentage.

Zeder and his two stalwart men wanted Chrysler, the manufacturing genius, and truth to tell he wanted them and their car and their services. But the fates continued to buffet him about from place to place and—fully conscious of their zeal and loyalty—Chrysler urged them to find other affiliations. They reluctantly sought such affiliations—almost afraid, as Zeder expresses it, that someone would take them up. Several someones almost did take them up but in the most perilous—or promising instance, Zeder in spite of the fact that he had almost ex-

hausted his personal resources in maintaining intact his splendid organization and precious car, withdrew at the last moment.

John N. Willys was keenly interested in it. So was William C. Durant, so were the Whites in Cleveland and the Studebakers in South Bend. So were Hornblower & Weeks, a financial firm. So much interested were Hornblower & Weeks that they were anxious to put $20,000,000 back of Zeder and they urged him to call it the Zeder car. This time, however, the fates were more propitious. Chrysler had consummated the five year arrangement with Maxwell.

The one-time Chalmers plant was ready and waiting and in effect Chrysler said: "Here boys your chance has come at last. The reward of your loyalty and your waiting is at hand. Move into the Chalmers plant and go ahead."

This, in a condensed and sketchy way, is about how the Chrysler car and the vast Chrysler business actually happened. Zeder and his confreres had a dream not merely of a car and of a man to build it but of raising the status of the automotive engineer. They had seen that the early engineers of the industry were hired men of the management and they longed and planned for the day when engineering would come into the honor and respect to which they were sure it was

entitled. There is a tinge of real romance in the fact that Zeder clung to this determination until his personal fortunes were impaired—holding his staff together for a period of three long years. Chrysler was never unconscious of this spirit of business heroism but never sure that he would be able to take advantage of it. Chrysler is always the first to say how much he owes to engineering, just as he has admitted his debt in public a hundred times to sales and advertising, but engineering and sales and advertising have no misapprehension regarding the paramount role of Chrysler. The man is undoubtedly one of a very elect and distinguished half dozen in the industry, insofar as natural ability is concerned.

It is not hard to understand how and why every now and then a man, like Ford or Chrysler, springs out of obscurity in America with almost a full-fledged genius for mechanical things. But, it is rather difficult to comprehend how a man like Chrysler, with little in his boyhood circumstances to warrant it, likewise manifests a sort of an intuitive mastery of both management and finance. Having been a mender of broken business at the outset of his automotive career it was cynically reasonable to assume that when he was given the opportunity to build a business of his own all might not go so blithely and well.

In fact, it was quite generally said when he essayed to produce the Chrysler that it was a pity that such a splendid executive should undertake so late in the day to produce a new car.

This was said quite sincerely and seriously and even solemnly by brother manufacturers, motor car merchants and bankers alike. And Mr. Chrysler admits that while he will strictly maintain that he worked hard for the success which swept in upon him like a flood he is still a bit surprised that it happened, when he looks back upon it.

Zeder tells a picturesque story of the first view which Mr. Chrysler had of the car which was to bear his name in the plant at Elizabeth, New Jersey, where Zeder, Breer and Skelton had done their preliminary work. Scarcely a word passed between the two men as they drove to Elizabeth. Once inside the plant Chrysler had eyes for nothing else but the motor which was perched up on a block. For hours he puttered over it, fondled it, examining part after part, listening to its humming, studying its design—steadily growing more enthusiastic and finally beginning to rear his approbation.

Off in another corner a wooden model of the proposed car has been built. He scrutinized this, too. The hands of the clock pulled on—eleven o'clock—twelve o'clock—one o'clock—

two o'clock—when Chrysler, pushing Zeder outside and into the immense assembly room, reached for a hand, found it and in a ringing voice, shouted:

"Fred, I'm with you."

In the thin light which filtered from the partly opened door of the experimental laboratories these two men, right hands clasped, left arms thrown about each other's shoulders, wept, unashamed. The years which had separated them had been spanned. Nor, is this romancing.

Their way, together, wasn't to be easy. Chrysler, taking over the management of the Maxwell Motor Car Co., in June, 1921, found disorganization. More than that—demoralization. The exigencies of business demanded that he clean out the place before introducing Zeder's product. I (MacManus) was called in and it was suggested that if I could do as good a job with Maxwell, as had been done with Dodge Brothers, appreciation would follow.

As I have written in another work:

"Here was a case in which a property and its product were actually discredited all over the United States. Insofar as the world knew—excepting for the sales and advertising policies developed around it—it continued to deserve discredit long after Mr. Chrysler took it in hand. His name was not used, so advertising could not

exercise the advantage of pointing to his record and reputation as a reason why the product was improving. No—the old discredited name was retained, and advertising and selling had nothing to fall back upon excepting the artfulness and wizardry of words. Despite this almost insuperable handicap, the old and once discredited product had won a splendid reputation and was in ever-increased demand when the moment arrived to supplant it with another product bearing the Chrysler name."

The product was to bear the name of Chrysler largely because Fred M. Zeder would not have it otherwise. Albert R. Erskine, familiar with Zeder and appreciative of the engineering abilities of the organization Zeder had built, was not minded to relinquish his plans merely because Zeder had chosen Chrysler as a champion. Back in New York there were important stockholders who were not entirely happy with their investment in Maxwell. A representative of Studebaker's brokers appealed to them. Appealed and found ready ears. A proposition was made. There came a counter proposition. Negotiations proceeded and reached their meeting place when the Studebaker Corporation, in 1923, offered $26,000,000 for the Maxwell properties.

When the offer was made Chrysler wrote another figure on a slip of paper—the amount

undisclosed O and passed it across his desk to the broker. The negotiations came to an end a few days thereafter.

The new car—introduced as the Chrysler—was exhibited, for the first time, at the automobile show in New York in January, 1924. It was an instantaneous success. In 1924 the company produced 32,000 Chrysler cars and 50,000 Maxwells. In 1925 the Maxwell name was dropped and three years later the annual production had reached 250,000 units.

A little more than four years after the introduction of the product which bore his name, Chrysler was to register another—and perhaps the greatest—of his personal triumphs. Dodge Brothers, under the management of Dillon, Read & Co., was becoming a faltering concern. One day in June, 1928, Clarence Dillon approached Chrysler with a proposition. Chrysler listened. Smiled reminiscently. Probably thought of a prediction which had been made a few short years before—a prediction to this effect: "The day will come when Chrysler will usurp the position of Dodge Brothers." That prediction was made to Chrysler, in 1923, by one of the authors, and hearing it, the manufacturer grew scornful. Now, with Dillon standing before him, Chrysler had realization within his hands.

Negotiations were quickly started, with Chrysler laying down the stipulation that ninety per cent of the stockholders in Dodge Brothers must give their consent to the sale. There was never, at any time during the negotiations, a reliable assurance that the purchase of the properties would be consummated. As a matter of fact, during the final week before the transfer the situation looked decidedly dubious, and Dillon, Read & Co., were compelled by Chrysler to go into the open market and buy sufficient stock to comply with his requirement that ninety per cent of the stock should vote favorably upon the purchase.

The deal was accomplished at 5:30 o'clock one afternoon. Acting under instructions, K. T. Keller, of the Chrysler Corporation, sat at the end of an open telephone wire between Detroit and New York for a full hour before hearing from the New York office, the voice of B. E. Hutchinsons, the treasurer.

"We've bought Dodge Brothers!" cried Hutchison, and then began to make some humorous comments on Keller's long wait to find there was no one on the other end of the wire.

Keller and his men immediately upon receiving official notice ran out of the Detroit offices and were on their way to the plant of Dodge Brothers while Hutchinson was still talking.

They took with them new signs, ready billheads, and other business stationery bearing the Chrysler Corporation imprint.

The following morning Clarence Dillon visited Chrysler to offer formal congratulations on the completion of the purchase. He assured Mr. Chrysler that while Mr. Wilmer was anxious to withdraw as soon as possible he would remain as long as Mr. Chrysler pleased, and offer him every possible assistance. Mr. Chrysler thanked Mr. Dillon and through him Mr. Wilmer for their courtesy but added quietly:

"Mr. Dillon, our executives took possession of the plant last night and are operating it this morning. We are grateful but it will not be necessary to call upon your executives."

Probably never before in the history of American business was a vast industrial establishment transferred by long distance telephone to a new management in full and competent control the morning thereafter.

The story is literally true—and characteristically Chryslerish.

CHAPTER TWENTY-TWO

The Rise of the Fishers

It is like green grass and running water in the desert of the daily reportorial grind to encounter men who have done really big things and who, at the same time, instinctively and honestly sheer away from a public proclamation of their achievements. It is all the more refreshing when this aversion is based not upon any spirit of mock modesty but has its rise in a genuine feeling that publicity is not always business prudence.

This attitude of mind is truly and sincerely expressive of the Fisher brothers, whose gigantic growth is not merely one of the phenomena of recent times but, in all probability, is the most impressive development that has ever occurred in national or international industry and finance.

Personally and privately the Fishers, to use a homely old American colloquialism, are "as easy as an old shoe." They have their quite proper and justifiable pride in what they have done but—they look askance at public adulation.

In a certain sense, however, they are unable to escape the publicity which must attend such

mammoth achievements as they have recorded in less than twenty years. The things they have reared are too gigantic to be hidden. They have long since ceased to be merely the marvel of Detroit.

Their habitat—marked by a train of tremendous enterprises covering the country and crossing the oceans—is not merely Detroit, nor even the financial center of New York, but the whole of the United States and all the habitable civilized world. If it were compulsory to toss into a metaphorical hat the names and the deeds of all the great men of motordom—listing all those mentioned in this book—and then pick out the greatest names and the greatest deeds, the choice would, of necessity, fall upon the Fishers.

They have passed far beyond the boundaries of motordom—after imprinting upon it a power and a usefulness probably paramount to any other which has contributed to its mammoth upbuilding. There is a familiar saying in Detroit and New York which is something very much more than a familiar saying.

It is frequently repeated:

"If there had been no Fisher Body, there could have been no General Motors."

The Fishers probably shudder with distaste when that is said in their presence. But it happens to have the superlative merit of being true,

as any great executive of General Motors will testify.

So, while the Fishers are limited to a chapter in this book, in the present avid public appetite for news of great commercial achievements they should have a book to themselves.

Neither the appealing and dramatic story of Ford, nor the rise of Rockefeller or Carnegie, nor of any of the other great American industrial giants has in it the spice and tang and poignant human appeal of the rocket-like rise of these brothers from the bench to Gargantuan wealth and power in a few short years.

This story is different because it has in it the beautiful and appealing element of the probably unprecedented solidarity of seven brothers moving forward, shoulder to shoulder, towards tremendous destinies, merging their minds into common action and retaining through it all the simple viewpoints of seven perfectly plain human beings.

American business has never before seen a family which was also a complete manufacturing, managing, and fiduciary corporation. This is literally true of the Fishers. They could, if they would, constitute a complete motor car manufacturing corporation or an immense body-building corporation, or the management of a

railroad, or a steel mill, or a locomotive works, or a great bank and trust company.

The fact that they do not choose to do so does not belie the other fact that they could if they would.

Their preference is for cooperation with others —an entrance into all of the fields named with unlimited resources but in a purely directive capacity. But no such spectacle of actual business capacity to enter any or all of the broadest fields of American business has ever been witnessed in one American family.

Perhaps the nearest approach to it in the world history of finance has been the maintenance through the years of the European dynasty of the House of Rothschild. But even that mighty power falls short of furnishing a perfect parallel to the Fisher accomplishment.

The Fishers started their rise from the small city of Norwalk, Ohio. Here their father owned a blacksmith and carriage-making shop. Here Fred J. Fisher, eldest of the brothers and their leader, served his apprenticeship in his father's business. Here, also, did Charles T. Fisher, second of the brothers, serve. William A., third in line, went to work for a railroad company, but Lawrence P., Edward F., and Alfred J., in order, followed the footsteps of their oldest brothers. These are the six brothers in General

Motors—the seventh, and the youngest, will follow.

From here, too, Fred J. Fisher, while still a young man, was attracted to the growing automobile industry in Detroit. Six months in each year, for a number of years, he worked, and planned, and studied the industry in Detroit. Six months in each year he returned to his father's side—to help in the rush season when the little carriage plant in Norwalk sometimes employed as many as twenty-five men. It was in these years that Fred J. Fisher grew to know men who worked with their hands. Learned to talk their language. To have sympathy for them. Between father and son there also grew that rare understanding that sometimes comes between father and son.

"I understood my father and he understood me," Mr. Fisher told the authors. "There I was—a young man trying to get a toehold in a new industry. Unlike a lot of parents of that day and a lot of business men of that day, my father foresaw a tremendous future in automobiles. He taught me the art of body building, gave me business counsel, and encouraged me in my dreams. He helped—so much."

Many stories have been told of how this family of brothers started out, shoulder to shoulder, eye to eye, mind to mind along the road of their tre-

mendous destinies. One of the frequently-told stories repeats that Fred J. Fisher drew his first impression from the Rothschilds and the incident of Rothschild calling his family together, tieing a representative number of sticks in a bundle and trying, without success, to break them—whereas the sticks were easy to break, singly.

Fred J. Fisher did not get his inspiration from reading that story. This can be set down as a fact. What brought about their common action was natural growth. Consider them this way: A large family of boys in a small community. Few distracting amusements such as a city would have furnished. Outside influences were, then, of minor importance. The family grew as a self-contained unit, each member finding pleasure in the company of the others. Then, too, their father and their mother taught them the strength of home ties. They could never forget such teaching because it became ingrained into their natures.

It should not be inferred, however, that these brothers do not have their arguments. Strong-willed, all of them, arguments come in the steady flow of their undertakings. Frequently there are as many opinions as there are brothers. The common procedure is to get together, thresh out the chaff from all viewpoints and with a decision reached to get behind it—solidly! Fred J.

Fisher becomes their spokesman and they support his decision (which is really the decision of all) without equivocation. There is never any sniping from the rear nor any whispering from lips hidden behind cupped hands.

We are getting ahead of the story. But, getting ahead of it purposely. We are trying to show you how these brothers work. So much has been heard about them in recent years and so little has been written that is authentic that it is necessary to present a picture of them that they may be understood. Or, leastways, better understood. As said in the beginning of this chapter, their aversion to public proclamation of their achievements is not based on mock modesty but because of a genuine feeling that publicity is not always business prudence.

Fred J. Fisher, in the industry almost from its beginnings, was ever mindful of the rise of names and the dissolution of men. Thrown into close contact with early leaders, he saw them have their moments of public praise and, too, watched as they fell towards oblivion. He reasoned that men thrown into the glamour of public interest often, in their new-found power, reached too far and, in reaching, lost balance. Of a taciturn nature, he determined this should not happen to him, were he fortunate enough to

scale the heights; nor, if he could prevent it, should it happen to his brothers.

Before he was thirty years old he was general manager of the Wilson Body Company in Detroit. At the time it was one of the large companies in the industry. Having come up from the bench, he was not gaining experience in management. In 1908, with his brother Charles T., he organized the Fisher Body Corporation with a capitalization of $50,000. Business didn't come rapping at their doors; they had to go out and get it. They did. They experienced hardships just as most business men in the beginnings of their careers experience them. But—they succeeded. Slowly and surely.

So well did they succeed, and so skillfully did they manage that which they had that, in 1918, William C. Durant, again in control of General Motors, visited them and proposed a purchase which would consolidate the Fisher interests with General Motors. Accompanying Durant on that business pilgrimage was John J. Raskob. The Fishers listened to the offer and promptly refused it.

Nor could Durant, with all his persuasiveness in words, sway them. Nor could Raskob, with all his wizardry of figures, excite them. Polite, but obdurate, they shook their heads. Expressing disappointment, Durant and Raskob said

their "good-byes" only to return a few months later with another proposition.

"We will give you a contract to make the bodies for all General Motors cars," proposed Durant.

"On what basis?"

"In return you will sell General Motors a sixty per cent stock interest in your business."

"Who will manage our business?"

"You will."

"You mean you want to buy sixty per cent of our stock and leave us in complete charge of the business."

"Yes."

"Does that mean we cannot sell bodies to other automobile manufacturers?"

"No. So long as you supply General Motors with its needs it will be satisfactory."

"What are the financial arrangements?"

Durant and Raskob explained, in detail. The Fishers accepted.

Thus were their beginnings within the councils of General Motors.

By 1923 so great had become the Fisher contribution to the success of General Motors that there was considerable speculation in high financial circles as to whether the Fisher Body Corporation, with its investment many, many, many millions and its employment of more than 50,000

men, would absorb General Motors, or vice versa. Negotiations were started that ended with the Fisher brothers throwing their complete body-building resources into General Motors and going forward with the Corporation as a unit.

Each organization gained, tremendously, by that consolidation. That was as it had to be else it could not have been equitable. With little question, however, General Motors (and this pertains particularly to the stockholders of whom there are thousands scattered across the world) was the big winner. To help you arrive at that same conclusion, here is the balance sheet of General Motors Corporation, by years, from 1923, when the Fishers became additionally active in the management.

	Net Sales	Net income available for Dividends
1923	$ 698,038,947	$ 72,008,955
1924	568,007,459	51,623,490
1925	734,592,592	116,016,277
1926	1,058,053,338	186,231,182
1927	1,269,519,673	235,104,826

The Fishers would protest vehemently at any attempt to place all credit for this showing in their hands. They would be justified in such protests. For there are other men within Gen-

eral Motors to whom great credit must accure. But, in nowise detracting from these men—for there is credit enough to go around with a generous share for all—this statement holds true:

To the Fishers belongs the major portion of the honor for that achievement. The Fishers will again shudder at this disclosure. But the fact will remain.

It is one of the striking characteristics of the great Fisher growth that it is, as it were, rooted in the soil of the nation and not a by-product of the stock ticker. Of necessity purchase and control of stocks on a huge scale has been a part of the process, but the great motivating purpose in all of these operations has been to build by investment in properties which are basic and elemental and in themselves sources of fruitful growth to the entire community.

In the case of Henry Ford genius has staked almost its all upon one type of transportation. In the case of the Fishers there has been an equal display of confidence in the permanency of that particular type of transportation through the upbuilding of General Motors. But they have radiated out of this center into corollary operations of equal magnitude, each and every one of them contributing to the solid enduring growth of the country.

It may seem absurd to say that so great an operation as General Motors may in due time come to be an incident in the total of Fisher activities but it is well within the bounds of possibility. It is not the province of this book to indulge in speculations as to the resources of those discussed in its pages and no information is forthcoming from the Fishers as to their assets. But a mere hazard on the subject may not be without interest. Separate from all their other activities is a magnificent piece of handling and directing machinery called The Fisher Company through which their pooled personal and individual resources find investment largely under the direction of a young and very able man named Clarence Bitting who has himself risen to great wealth by rendering a great service.

Absolutely beggared of exact information, the authors would nevertheless venture to assume the resources of that corporation at not less than $500,000,000. This money—or part of it—has quietly penetrated such sound and basic properties as Baldwin Locomotive, Westinghouse Electric, Texas Oil, New York Central, and others. So the Fisher empire, while it has its capital and center in the motor car, ramifies in a dozen supporting directions which give the Fisher fortune a substance and support which indicates that it

may become one of the greatest financial forces in the world.

One of the amazing characteristics of this group is the quiet and easy way in which they push great projects to completion. The magnificent new Fisher building in Detroit—justly described as the most perfect office building in the world—is a case in point.

It is not extravagant to say that this structure despite its strong note of modernity compares favorably with the best and most beautiful of classic monuments, and yet, applying to it the intensive processes which govern their other business operations, the Fishers completed this exquisite architectural triumph in twelve months' time. All in all the story of the Fishers may well conclude with the note with which it began. They are almost undeniably the greatest of all the great figures which the whirling wheels of the motor car have produced.

Conclusion

This conclusion is being written in a hotel room far above the eddying traffic—

An autumn moon is playing hide-and-seek with clouds riding across the sky. Down the river, the cat walks of an international bridge

are making way for heavy, steel girders—ghostly in the half-light is the structural work of man—and soon automobiles will be crossing it carrying their thousands of tourists and commuters into Canada. Up, a little way, a dredge is preparing for an automobile tunnel, under the river. The lights of Windsor, Sandwich, and Walkerville wink at the darkness along the Canadian shore.

The heavy throatings of lake freighters sound as these traffickers in ore and wheat and stone and lumber go gliding by—shadows under the moon. Off in the distance the lights of the boat to Cleveland do their midnight dance on the slowly heaving river swell.

Against the sky, turrets of downtown are white-lighted . . . in the streets, automobiles slip along, street cars rumble, newsboys shout . . . a shriek of sirens, a clatter of bells, and fire departments go screaming on to their rendezvous with Hephæstus.

Along the river for twenty miles Detroit lies—back, five, six, eight miles, it spreads . . . a city approaching 2,000,000 . . . a city made great by gasoline automobile machines—and the men who pioneered them, and the man who carried them on.

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